



This document is scheduled to be published in the Federal Register on 06/19/2012 and available online at <http://federalregister.gov/a/2012-13886>, and on FDsys.gov

DEPARTMENT OF THE INTERIOR

Fish and Wildlife Service

50 CFR Part 17

[Docket No. FWS–R8–ES–2010–0070]

[4500030114]

RIN 1018–AX10

Endangered and Threatened Wildlife and Plants; Revised Designation of Critical Habitat for the Pacific Coast Population of the Western Snowy Plover

AGENCY: Fish and Wildlife Service, Interior.

ACTION: Final rule.

SUMMARY: We, the U.S. Fish and Wildlife Service (Service), designate revised critical habitat for the Pacific Coast distinct population segment (DPS) (Pacific Coast WSP) of the western snowy plover (*Charadrius nivosus nivosus*, formerly *C. alexandrinus nivosus*) under the Endangered Species Act of 1973, as amended (Act). In

total, approximately 24,527 acres (9,926 hectares) of critical habitat for the Pacific Coast WSP in Washington, Oregon, and California, fall within the boundaries of the critical habitat designation. This revised final designation constitutes an increase of approximately 12,377 ac (5,009 ha) from the 2005 designation of critical habitat for the Pacific Coast WSP. A taxonomic name change has occurred and been accepted for the snowy plover. Throughout the remainder of this document, we will use the currently recognized name for the subspecies, *Charadrius nivosus nivosus*, to which the listed entity (Pacific Coast WSP) belongs for references to the Pacific Coast WSP.

DATES: This rule becomes effective on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: This final rule, final economic analysis, and maps of critical habitat will be available on the Internet at <http://www.regulations.gov> at Docket No. FWS–R8–ES–2010–0070, and at <http://www.fws.gov/arcata/>. Comments and materials received, as well as supporting documentation used in preparing this final rule, are available for public inspection, by appointment, during normal business hours, at the U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office, 1655 Heindon Road, Arcata, CA 95521; telephone 707–822–7201; facsimile 707–822–8411.

FOR FURTHER INFORMATION CONTACT: Nancy Finley, Field Supervisor, or Jim Watkins, Fish and Wildlife Biologist, U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office, 1655 Heindon Road, Arcata, CA 95521; telephone 707–822–7201;

facsimile 707–822–8411. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Information Relay Service (FIRS) at 800–877–8339.

SUPPLEMENTARY INFORMATION:

Executive Summary

Why we need to publish a rule. This is a final rule to revise the designation of critical habitat for the threatened Pacific Coast population of the western snowy plover under the Act. Under the Act, any species that is determined to be endangered or threatened requires designated critical habitat. We must issue a rule to designate critical habitat. In total, approximately 24,527 acres (9,926 hectares) of critical habitat for the Pacific Coast WSP in Washington, Oregon, and California, fall within the boundaries of the critical habitat designation.

We designated critical habitat for this species in 1999 and again in 2005. As part of a settlement agreement, we agreed to reconsider the designations. A proposed revised critical habitat was published in the **Federal Register** on March 22, 2011 (76 FR 16046). This constitutes our final revised designation for the Pacific Coast WSP.

We are making the following changes to the critical habitat designation. See Table 2 for details.

State	Current critical habitat designation	Revised designation	Factors affecting revised designation
Washington	2,526 acres	Four units in	We are excluding 425

State	Current critical habitat designation	Revised designation	Factors affecting revised designation
	(1,023 hectares) of Federal, State, and Private lands	Washington, totaling 6,077 acres (2,460 hectares)	acres (172 hectares) of Tribal lands from designation based on partnerships.
Oregon	2,147 acres (869 hectares) of Federal, State, and Private lands	9 units in Oregon, totaling 2,112 acres (856 hectares)	We are excluding 3,106 acres (1,257 hectares) of lands from designation based on partnerships with landowners.
California	7,477 acres (3,030 hectares) of Federal, State, and Private lands	47 units in California, totaling 16,337 acres (6,612 hectares)	We are excluding 266 acres (108 hectares) of lands from designation based on partnerships with landowners.

The basis for our action. Under the Endangered Species Act, any endangered or threatened species must have a designated critical habitat. We are required to base the designation on the best available scientific data after taking into consideration economic and other impacts. The Secretary can exclude an area from critical habitat if the benefits of exclusion outweigh the benefits of designation, unless the exclusion will result in the extinction of the species.

We prepared an economic analysis. To ensure that we consider the economic impacts, we prepared a new economic analysis of the proposed revised designation. On January 17, 2012, we made available our revised draft economic analysis (77 FR 2243). We received public comments on the draft economic analysis and revised it based on input from the public. The economic analysis did not identify any areas with disproportionate costs associated with the designation, and no areas were excluded from the final designation based on economic reasons.

We incorporated peer review. We sought comments and information from independent specialists to ensure that our critical habitat designation was based on scientifically sound data, assumptions, and analyses. We had invited these peer reviewers to comment on our specific assumptions and conclusions in the proposed revision of the critical habitat designation. Information we received from peer review is incorporated in this final revised designation.

Background

It is our intent to discuss in this final rule only those topics directly relevant to the development and designation of revised critical habitat for the Pacific Coast WSP under the Act (16 U.S.C. 1531 *et seq.*). For more information on the taxonomy, biology, and ecology of the Pacific Coast WSP, refer to the final listing rule published in the **Federal Register** on March 5, 1993 (58 FR 12864); the 12-month finding on a petition to delist the Pacific Coast WSP (71 FR 20607, April 21, 2006); and the revised proposed critical habitat rule published in the **Federal Register** on March 22, 2011 (76 FR 16046).

Additional information on this species can also be found in the Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*) finalized on August 13, 2007, which is available from the Arcata Fish and Wildlife Office (see **ADDRESSES** section) (Service 2007). Information on the associated draft economic analysis for the revised proposed critical habitat was published in the **Federal Register** on January 17, 2012 (77 FR 2243). The nomenclature for the

listed entity has changed to the “Pacific Coast population of the western snowy plover (*Charadrius nivosus nivosus*),” but this change does not alter the description or distribution of the species.

Change in Taxonomic Nomenclature

In our January 17, 2012, **Federal Register** publication (77 FR 2243), which made available the draft economic analysis on the March 22, 2011, revised proposed critical habitat for the Pacific Coast WSP, we proposed a taxonomic and nomenclatural change for the Pacific Coast WSP from *Charadrius alexandrinus nivosus* to *C. nivosus nivosus* and for that change to be published in the Code of Federal Regulations (CFR). Based on information presented in that notice (see the notice’s section entitled *Taxonomic and Nomenclatural Changes Affecting Charadrius alexandrinus nivosus*) and acceptance of the change by the scientific community, we are amending the List of Endangered and Threatened Wildlife at 50 CFR 17.11(h) to identify the listed entity as the western snowy plover (Pacific Coast population DPS) (*Charadrius nivosus nivosus*), to update the “Historic Range” column to clarify that the historical range of the Pacific Coast population DPS is California, Oregon, Washington, and Mexico, and to update the “Vertebrate population where endangered or threatened” column to indicate that the DPS is threatened in California, Oregon, Washington, and Mexico (within 50 miles of Pacific coast).

New Information on Species’ Description, Life History, Ecology, Habitat, and Range

We did not receive any new information pertaining to the description, ecology, or habitat of the Pacific Coast WSP following the 2011 revised proposed critical habitat rule (76 FR 16046; March 22, 2011).

Climate Change

Our analyses under the Act include consideration of ongoing and projected changes in climate. The terms “climate” and “climate change” are defined by the Intergovernmental Panel on Climate Change (IPCC). “Climate” refers to the mean and variability of different types of weather conditions over time, with 30 years being a typical period for such measurements, although shorter or longer periods also may be used (IPCC 2007, p. 78). The term “climate change” thus refers to a change in the mean or variability of one or more measures of climate (e.g., temperature or precipitation) that persists for an extended period, typically decades or longer, whether the change is due to natural variability, human activity, or both (IPCC 2007, p. 78). Various types of changes in climate can have direct or indirect effects on species. These effects may be positive, neutral, or negative, and they may change over time, depending on the species and other relevant considerations, such as the effects of interactions of climate with other variables (e.g., habitat fragmentation) (IPCC 2007, pp. 8–14, 18–19). In our analyses, we use our expert judgment to weigh relevant information, including uncertainty, in our consideration of various aspects of climate change.

Sea level rise and hydrological changes associated with climate change are having and will continue to have significant effects on Pacific Coast WSP and its habitat over the next several decades. Sea level rise is a result of two phenomena: thermal expansion (increased sea water temperatures) and global ice melt (Cayan *et al.* 2006, p. 5). Between 1897 and 2006, the observed sea level rise has been approximately 0.08 inches (in) (2 millimeters (mm)) per year, or a total of 8 in (20 centimeters (cm)) over that period (Heberger *et al.* 2009, p. 6). Older estimates projected that sea level rise along the California coast would follow a similar rate and reach 0.7–2 feet (ft) (0.2–0.6 meters (m)) by 2100 (IPCC 2007). Recent observations and models (including the models we used to evaluate Pacific Coast WSP habitat) indicate that those projections were conservative and ignored some critical factors, such as melting of the Greenland and Antarctica ice sheets (Heberger *et al.* 2009, p. 6). Heberger *et al.* (2009, p. 8) have updated the sea level rise projections for California to 3.3–4.6 ft (1.0–1.4 m) by 2100, while Vermeer and Rahmstorf (2009, p. 21530) calculate the sea level rise globally at 2.4–6.2 ft (0.57–1.9 m); in both cases, recent estimates were more than twice earlier projections. Combined with California’s normal dramatic tidal fluctuations and coincidental storms, the severity of the latter increasing with more frequent El Niño Southern Oscillations due to increasing surface water temperature (Cayan *et al.* 2006, p. 17), the effects of sea level rise are expected to reach farther inland than previously anticipated (Cayan *et al.* 2006, pp. 48–49; Cayan *et al.* 2009, p. 40). Similar effects are expected to occur along the Oregon and Washington coastlines (Galbraith *et al.* 2002, pp. 173–183; Huppert *et al.* 2009, pp. 285–309; Ruggiero *et al.* 2010, 211–262).

For the Pacific Coast WSP and other shorebird habitat, Galbraith *et al.* (2002, pp. 173–183) in a study of sites in Washington (Willapa Bay) and California (Humboldt Bay and San Francisco Bay) projected losses of intertidal habitat could range between 20 and 70 percent of the existing habitat. In addition, sea-level rise may result in coastal areas to lose their ability to continue to support the current number of shorebirds. Areas with steep topography (Northern California to Washington State) or seawalls (Southern California) with limited beach habitat are expected to have the most severe losses (Galbraith *et al.* 2002, pp. 173–183). Additionally sea-level rise would cause: (1) Inundation of low-lying areas by high tides; (2) flooding of coastal areas during major storm events, especially near river mouths; (3) acceleration of erosion of coastal bluffs; and (4) a shift in beach profiles, move the position of the mean high water line landward (Huppert *et al.* 2009, p. 285).

In our development of this critical habitat designation, we evaluated numerous climate change models of varying scope and scale. Due to the wide range of the Pacific Coast WSP (Washington to Mexico) we selected models which reflected conditions across the range for the Pacific Coast WSP and those developed or accepted by the Department of the Interior as a basis for determining the extent of the effects of climate change on coastal habitat used by the Pacific Coast WSP.

Previous Federal Actions

The Pacific Coast WSP was listed as a threatened species on March 5, 1993 (58

FR 12864). Critical habitat was designated in 1999 (64 FR 68508; December 7, 1999). That rule was remanded and partially vacated by the U. S. District Court for the District of Oregon on July 2, 2003, in order to conduct a new analysis of economic impacts (*Coos County Board of County Commissioners et al. v. Department of the Interior et al.*, CV 02-6128, M. Hogan). We published a revised rule designating critical habitat on September 29, 2005 (70 FR 56970).

A 5-year status review of the population under section 4(c)(2) of the Act was completed June 8, 2006, based on the analysis conducted for the section 4(b)(3)(B) status review for a 12-month finding on a petition to delist the Pacific Coast WSP (71 FR 20607; April 21, 2006). Because the Pacific Coast WSP was listed prior to our 1996 policy published in the **Federal Register** on February 7, 1996 (61 FR 4721) regarding recognition of distinct population segments, in our 12-month finding, we reviewed and confirmed our determination that the Pacific Coast WSP constituted a valid distinct population segment.

On October 2, 2008, the Center for Biological Diversity challenged our 2005 critical habitat designation (70 FR 56970; September 29, 2005) (*Center for Biological Diversity v. Kempthorne, et al.*, No. C-08-4594 PJH (N.D. California)). This litigation was resolved through settlement, in which the Service agreed to conduct a rulemaking to consider potential revisions to the designated critical habitat for the Pacific Coast WSP. On May 11, 2009, the U. S. District Court for the Northern District of California adopted the terms of the settlement agreement and issued an order requiring the Service to submit

a final revised critical habitat designation to the **Federal Register** by June 5, 2012. This rule complies with that court order.

Summary of Comments and Recommendations

We requested written comments from the public on the 2011 proposed rule to revise critical habitat for the Pacific Coast WSP during two comment periods. The first comment period requesting comments in association with the publication of the proposed revised rule (76 FR 16046) opened on March 22, 2011, and closed May 23, 2011. Upon the availability of the draft economic analysis (DEA) associated with the revised proposed critical habitat, a second comment period covering both the revised proposed rule and the DEA opened on January 17, 2012 (77 FR 2243) and closed on February 16, 2012. During both public comment periods, we contacted appropriate Federal, State, and local agencies, scientific organizations, and other interested parties and invited them to comment on the proposal to revise critical habitat for this species and the associated DEA. During the comment periods, we requested that all interested parties submit comments or information related to the proposed revisions to critical habitat, including (but not limited to) the following: unit boundaries; species occurrence information and distribution; land use designations that may affect critical habitat; potential economic effects of the revised proposed designation; benefits associated with critical habitat designation; areas proposed for designation and associated rationale for the non-inclusion or considered exclusion of these areas; and methods used to designate critical habitat.

During the first comment period, we received 149 comment letters directly addressing the proposed revision of critical habitat, as follows: 1 from a peer reviewer, 5 from Federal agencies, 1 from a Native American Tribe, and 142 from public organizations or individuals. During the second comment period, we received nine additional comments addressing the revised proposed critical habitat designation and the DEA. Of these latter comments, none were from Federal agencies, one was from a State agency, and the remaining eight were from public organizations or individuals. We did not receive any additional comments from Native American Tribes during the second public comment period. We reviewed all comments received for substantive issues and new information regarding the revised designation of critical habitat for the Pacific Coast WSP. All substantive comments are addressed in the following summary and any changes have been incorporated into this revised final rule as appropriate.

The open period for requesting public hearings on the revised proposed rule ran from March 22, 2011, through May 6, 2011 (76 FR 16046). The second open period for requesting public hearings associated with the January 17, 2012 (77 FR 2243), **Federal Register** publication ran from January 17, 2012, through February 16, 2012. We did not receive any requests for a public hearing during the two open periods.

Peer Review

In accordance with our Policy for Peer Review in Endangered Species Act Activities, published on July 1, 1994 (59 FR 34270), we solicited expert opinions from

three knowledgeable individuals with scientific expertise that included familiarity with the species, the geographic region in which it occurs, and conservation biology principles. One peer reviewer responded and generally supported the revised proposed designation, and provided additional information, clarifications, and suggestions that we have incorporated, as appropriate, to improve this revised final critical habitat rule. Other potential reviewers that were contacted could not respond due to prior commitments and timing of the requested review relative to the Pacific Coast WSP field season. Peer reviewer comments are addressed in the following summary and incorporated into the final rule as appropriate.

Peer Review Comments

(1) *Comment:* The peer reviewer affirmed that the background information, essentially the biology of the Pacific Coast WSP, was well represented. Additional information was provided for the distribution of Pacific Coast WSP in Oregon. The reviewer suggested including sites in northern Oregon not covered under the State's habitat conservation plan (HCP), and that the sites should be considered collectively, as plovers move between them.

Our Response: We appreciate the assessment of the revised proposed rule by the peer reviewer. We have identified all the areas we consider to have the physical or biological features essential to the conservation of the species or other areas we have determined to be essential for the conservation of the species as based on our criteria for designating critical habitat. Not all occupied sites were proposed as critical habitat.

Some areas meeting the definition of critical habitat have been excluded from this revised final critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section for a detailed discussion). Those sites that we consider to have spatial significance to one another were grouped as subunits of a larger unit. The northern Oregon sites referenced by the reviewer were not included because of their relatively limited use by Pacific Coast WSP at this time and they were determined not to be essential.

The HCP with the Oregon Parks and Recreation Department (OPRD) is a landscape-level conservation planning effort. It was developed with the assistance of a multi-partner steering committee that reviewed the recovery plan and objectives, historical plover use, and existing habitat conditions, and selected the most appropriate locations for reestablishment of plover nesting habitat. In addition, the HCP went through extensive public review at both the State and Federal levels, and incorporated appropriate input from those processes.

(2) *Comment:* The peer reviewer agreed with the conservation benefit of designating additional habitat for the Pacific Coast WSP. Specifically, the reviewer acknowledged that additional habitat is needed for connectivity between sites, and noted that the revised proposed rule leaves a 75-mile (mi) (121-kilometer (km)) gap between units on the north and south coasts of Oregon.

Our Response: We appreciate the peer reviewer's critical review. Connectivity is not the only criterion used to select sites. We refer readers to our **Criteria Used To**

Identify Critical Habitat section in the revised proposed rule (76 FR 16046; March 22, 2011). Selected sites must have regional importance, either for breeding or wintering Pacific Coast WSPs.

There are few additional suitable locations between Oregon's north and south coasts to designate as critical habitat. Sites were considered, but not proposed, due to habitat and development conditions that would adversely impact plovers were they to use the sites. Seventy-five miles is a relatively small gap in the range given that current gap between occupied habitat in Oregon and Washington is greater than 150 miles (241 km).

(3) *Comment:* The peer reviewer acknowledged the importance of addressing sea-level rise, but noted uncertainty regarding our ability to predict how Pacific Coast WSP will respond. In addition, the reviewer noted that we cannot adequately predict the response of Pacific Coast WSP prey sources to a rapidly changing beach environment that is compromised by years of beach stabilization and invasive, nonnative plants.

Our Response: We agree that the response of Pacific Coast WSPs and their prey is difficult to predict (refer to *Climate Change* section above). Our models for sea-level rise are general in nature as they must represent the entire range of the Pacific Coast WSP in the United States. Consequently, site- and regionally-specific models are relevant when assessing specific effects on species and locations, but for the purposes of this evaluation, landscape-scale models were used to assist us in establishing unit boundaries.

There is inherent uncertainty associated with the parameters in the model; however, assumptions were selected that were generally conservative to best protect the species. Our assessment of sea-level rise in the revised proposed rule only addresses habitat, and does not attempt to address prey response, plover use, and site-specific shoreline armoring, as these are conditions or parameters that cannot be adequately represented across the range of the species.

Federal Agency Comments

Bureau of Land Management

(4) *Comment:* The Bureau of Land Management (BLM) in Arcata, California, noted that, as proposed, Unit 5 (Subunits A, B, and C) has expanded to the west, encompassing the intertidal zone. Yet the eastern boundary remains the same as in prior critical habitat designations. BLM commented that they understand the rationale for the westward expansion based on year-to-year changes to the beach environment and improved mapping, because of expected inundation resulting from sea-level rise. BLM noted that critical habitat would be better served with an expansion to the east.

Our Response: Unit 5 primarily depicts mapping changes with improved information from the 2005 designation. We did not extend the unit to the east, as there is a dune crest that would separate such an eastern expansion from the ocean beach. Such a barrier would likely discourage Pacific Coast WSP use of the area, combined with the

paved road that reaches the length of Humboldt Bay's South Spit. Similarly, there is a dirt road to the east side of the dune crest in subunit CA 5B that may also discourage Pacific Coast WSP use of any eastern expansion area there.

Department of the Army (U.S. Army Corps of Engineers)

(5) *Comment:* The U.S. Army Corps of Engineers (USACE) challenged the need for critical habitat designation of the intertidal zone, stating that Pacific Coast WSPs generally forage on wrack deposited at the maximum high water mark, and roost well above this line and are not found along the water's edge.

Our Response: We agree that most foraging by Pacific Coast WSP on southern California beaches is associated with wrack; however, Pacific Coast WSP will use the intertidal areas. Use of intertidal areas may be greater where there is no offshore kelp beds to form well-developed wrack, such as in northern California, Oregon, and Washington. However, Pacific Coast WSPs have been documented foraging within the beach intertidal zone, and gathering food from both above and below the sand surface (Page *et al.* 2009; <http://bna.birds.cornell.edu/bna/species/154/articles/foodhabits>).

In areas that do not have well-developed wrack, the intertidal zone may play a greater importance in plover foraging. Consequently, the intertidal zone is essential to Pacific Coast WSP's conservation, thereby meeting the standard for designation as critical habitat when there is an association with other features and primary constituent

elements.

(6) *Comment:* The USACE commented that our approach to sea-level rise should be modified. The highest, high water boundary is recommended as a starting reference point. In addition, the USACE stated that the eastern boundary should not be established in areas that do not currently contain suitable habitat as a means to address sea-level rise.

Our Response: The purpose of this revised critical habitat designation is to conserve the Pacific Coast WSP. Establishing a western boundary is difficult, but the “water’s edge” is a boundary that is easily determined on the ground. We agree with the USACE that the water’s edge is difficult to map, and will change with seasonal and daily tides, storm events, beach configuration, etc. Our maps and the inclusion of the intertidal zone are an attempt to address the water’s edge issue and include the full range of habitat available to the Pacific Coast WSP.

We expanded critical habitat to the east from past designations to help ensure there will be adequate potential for habitat in the future as sea-level rise occurs. Not all habitat to the east is currently suitable, however, and we include in this critical habitat designation only those areas that we consider likely to be suitable with restoration. Not addressing the eastern expansion and only considering currently available habitat would limit the conservation value of a critical habitat designation as “coastal squeeze” occurs with a rise in sea level. Using elevations on the beach and adjusting them as sea-level rise occurs, as suggested by the USACE, makes it difficult for land and project managers

to determine critical habitat boundaries.

(7) *Comment:* The USACE questioned the validity of the Pacific Coast WSP listing as threatened. Specifically, the agency provided an example of a snowy plover banded in Utah appearing at a coastal Orange County, California, site.

Our Response: First, we note that the Service action at issue here does not concern whether or not the Pacific Coast WSP should be listed under the Act, but whether the Service should revise critical habitat for the species. Separate from this action, the Service is currently reviewing the listing status of the Pacific Coast WSP (see 76 FR 30377; May 25, 2011). For further discussion of listing issues, we direct the USACE to our 12-month finding on a petition to delist the Pacific Coast WSP (71 FR 20607; April 21, 2006), where detailed information on the Pacific Coast WSP distinct population segment listing is available.

The report cited by the USACE documents a Utah-banded snowy plover at an Orange County beach during the nonbreeding season (project-related observation period was from September 27, 2009, to October 29, 2009) (Ryan and Hamilton 2009, unpublished report). Our understanding is that the snowy plover banding in Utah was done during the end of the breeding season, on July 22, 2009 (F. Bidstrup, pers. comm. 2012). Few, if any, snowy plovers are present in Utah during the nonbreeding season (Paton 1995, p. 277). Interior-nesting snowy plovers are migratory, and are well documented overwintering along the Pacific Coast (71 FR 20607; April 21, 2006).

Generally, interior-nesting snowy plovers begin to appear along the Pacific Coast in mid-to late-July. In the 12-month finding, we cite instances of coastal-breeding snowy plovers nesting at interior sites, but acknowledge that this type of occurrence is rare based on banding records (71 FR 20607; April 21, 2006). This interchange in breeders accounts for the fact that there is little genetic difference between interior and coastal-breeding snowy plovers (71 FR 20607; April 21, 2006). Regardless, because the Pacific Coast WSP is generally a non-migratory population, and because it is ecologically separated from interior-nesting snowy plovers, it meets criteria for listing under our distinct population segment policy (71 FR 20607, April 21, 2006; 61 FR 4721, February 7, 1996) and the Act.

(8) *Comment:* The USACE stated that some of the areas proposed for designation as critical habitat do not meet the definition of critical habitat. Either the units are heavily used by recreational users, or are adjacent to disturbed areas. The commenter provided site-specific information where they believe designation is inappropriate due to beach nourishment projects at some units.

Our Response: We have determined based on our criteria for designating critical habitat that all the areas designated in this rule are essential either to or for the conservation of the Pacific Coast WSP and meet the definition of critical habitat. However, within each critical habitat unit there may be some areas that do not contain the physical or biological features and therefore would not be considered critical habitat. Due to mapping constraints (e.g., the scale of the unsuitable areas are too small to be

reflected on our maps), we did not remove these areas from this final revised designation. The analysis of effects of dredging and beach nourishment on Pacific Coast WSPs and their habitat is part of the section 7 consultation process under the Act. Effects to designated critical habitat and non-designated areas that are affected by the Federal action will be assessed under that process, as well as other effects to Pacific Coast WSPs.

Disturbance by recreational users and other sources will also be evaluated through the section 7 process where there is a Federal nexus. For areas lacking a Federal nexus, the Service will work with beach and land managers to implement recovery actions that will avoid or offset adverse effects of disturbance. We consider disturbance to be relative, as Pacific Coast WSPs respond differently to disturbance between sites.

(9) *Comment:* The USACE commented that the maps were easier to follow in the 2005 designation than those in the 2011 revised proposed rule because the 2005 maps provided more detail relative to land marks, such as roads.

Our Response: We appreciate this comment, and have made changes to the maps in this final rule. Specifically, the maps in this revised final rule have more location detail, such as roads, than we provided in the 2011 revised proposed rule. In remote areas where roads are scarce, we added watercourses. We acknowledge that watercourses are dynamic, and they can change with time, but they do provide some ability to locate unit boundaries on the ground.

Department of the Navy

(10) *Comment:* The Department of the Navy (Navy) commented that portions of two of their installations, Naval Support Area Monterey and Navy at Naval Base Ventura County, Port Hueneme, were included in the revised proposed rule, and requested they be exempted from critical habitat because both installations have an integrated natural resources management plan (INRMP).

Our Response: An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. A Service-approved INRMP is required to exempt a facility from critical habitat designation (refer to section of this rule concerning military exemptions under section 4(a)(3)). In 2001, the Navy completed the INRMP for Naval Support Area Monterey, which includes approximately 8 ac (3 ha) in Unit CA 22, Monterey to Moss Landing. Although the 2001 INRMP was approved by the Service, we determined that it did not address management actions for western snowy plovers and therefore does not meet the requirements for exemption from critical habitat. On March 30, 2012, we received an addendum to the 2001 INRMP; this addendum detailed additional conservation measures the Navy will implement for the Pacific Coast WSP at Naval Support Area Monterey. We have reviewed the addendum and have concluded that the conservation measures identified in the addendum would provide a benefit to the Pacific Coast WSP and its habitat. We approved and signed this addendum on May 24, 2012. As a result we have exempted the approximately 8 ac (3 ha) from Unit CA 22 from the designation under section 4(a)(3) of

the Act (see **Exemptions** section).

The Navy also identified that approximately 0.08 ac (0.03 ha) at Naval Base Ventura County, Port Hueneme, was included in the revised proposed rule. These lands were inadvertently included as part of Unit CA 39 in the revised proposed designation due to a mapping error. The identified 0.08 ac (0.03 ha) of Navy lands within Unit CA 39, Ormond Beach, have been removed in this revised final designation because they are unsuitable habitat and not essential to the conservation of the species.

National Park Service

(11) *Comment:* The National Park Service noted that critical habitat units for the Pacific Coast WSP were proposed within several units of the National Park system, including: Channel Islands National Park; Golden Gate National Recreation Area; Point Reyes National Seashore; Redwood National and State Parks; and Lewis and Clark National Historic Park. The National Park Service supports the proposed revised designation, and provided general information regarding its management for Pacific Coast WSP at its facilities.

Our Response: We appreciate the National Park Service's comments. No response necessary.

U.S. Forest Service

(12) *Comment:* The U.S. Forest Service (USFS), Siuslaw National Forest, Oregon, provided information regarding use and boundary descriptions for Units OR 7, OR 8, and OR 9.

Our Response: Lands covered under the OPRD HCP are excluded in this revised final rule. We note the USFS's comments; however, all units have changed with the exception of OR 8A, as a result of the exclusions. Federal lands remain unaffected by the OPRD HCP exclusions, and remain in this final designation.

State Agency Comments

(13) *Comment:* The OPRD requested that all lands under its HCP be “exempted” (meaning “excluded”) under section 4(b)(2) of the Act, because the OPRD HCP provides adequate management protections, making designation of critical habitat on those lands covered by the HCP redundant.

Our Response: Comment noted. In developing this final revised designation, we have considered OPRD's comments regarding exclusion of the HCP areas, and have conducted the analysis required under section 4(b)(2) of the Act to consider such exclusions (refer to the **Exclusions** section). As a result of our analysis, we have concluded that the benefits of excluding the lands covered under the OPRD HCP outweigh the benefits of including those areas as critical habitat and as a result the

Secretary has used his discretion to exclude these areas under section 4(b)(2) of the Act.

(14) *Comment:* The California Department of Parks and Recreation (CDPR) provided site information throughout California and pointed out errors in the unit descriptions. CDPR believes some sites proposed for designation are inappropriate, due to disturbance, proximity to campgrounds, recreational off-road vehicle use, and presence of lifeguard facilities.

Regarding Oceano Dunes State Vehicular Recreation Area (SVRA), CDPR acknowledged that the critical habitat designation would have little effect on day-to-day operations of Oceano Dunes SVRA and would not affect management activities for the Pacific Coast WSP. However, CDPR also stated that a critical habitat designation would increase administrative costs and implied that a critical habitat designation would require restoration of degraded habitat in Oceano Dunes SVRA.

CDPR stated that designation of the “riding area” of Oceano Dunes SVRA as critical habitat would be inappropriate because the riding area is degraded, used for recreation, and unoccupied by the western snowy plover. CDPR requested that the riding and camping areas be excluded from the critical habitat designation under section 4(b)(2) of the Act, because those areas (1) do not contain the physical or biological features essential for the western snowy plover, and (2) are covered by a management plan that provides conservation value greater than what would be provided by a critical habitat designation.

Our Response: The general comments from CDPR on the unit description errors were noted and incorporated into this revised final rule.

We agree with CDPR that a critical habitat designation should have little, if any, effect on day-to-day operations at Oceano Dunes SVRA and should not affect management activities for the Pacific Coast WSP unless a future project in Oceano Dunes SVRA would be authorized, funded, permitted, or carried out by a Federal agency.

We agree that portions of Oceano Dunes SVRA are degraded by recreation activities; however, habitat degradation does not preclude us from designating an area as critical habitat if the area contains physical or biological features essential to the conservation of the species and otherwise meets the definition of critical habitat. Also, annual surveys by CDPR and other groups have documented the species (in relatively large numbers) using Oceano Dunes SVRA in both breeding and wintering seasons. The use of areas for recreational activities does not preclude the use of the area by the Pacific Coast WSP. For example, the Silver Strand State Beach area identified as critical habitat (Unit CA 55B), as well as other high recreational use areas, plays an important role in Pacific Coast WSP conservation. We have determined that these areas are essential because they provide adequate space for high-tide roosting and foraging opportunities, especially during low human-use periods and during the winter. These areas may provide an even greater conservation value as habitat conditions shift and adaptive management strategies are implemented.

The DEA accompanying the proposed critical habitat rule determined that Oceano Dunes SVRA would incur some increase in administrative cost as a result of being included in critical habitat. These costs would be associated with coordination with a Federal agency during consultation under section 7 of the Act, additional analysis under California Environmental Quality Act (CEQA), or critical habitat analysis in the Oceano Dunes SVRA HCP. However, the DEA did not identify any disproportionate costs to the Oceano Dunes SVRA likely to result from a critical habitat designation.

The recovery plan for the Pacific Coast WSP (Service 2007) states that, because of the dynamic nature of western snowy plover habitat, the physical or biological features and specific primary constituent elements (PCEs) for the species may be seasonally variable or lacking. Accordingly, one or more PCEs may be absent during certain seasons. That said, a critical habitat unit is not required to contain all PCEs to qualify for designation. The implementing regulations for section 4 of the Act (50 CFR 424.12(d)) state that when several habitats, each satisfying the requirements for designation as critical habitat, are located in proximity to one another, an inclusive area may be designated as critical habitat. Portions of that inclusive area may not contain any or all PCEs. The Oceano Dunes SVRA is located within unit CA-31, and contains at least one PCE (open landscapes) year round, and may seasonally contain two other PCEs (frequency of inundation and organic debris). We have determined that Oceano Dunes SVRA plays an important role in conservation of the western snowy plover. That role may increase due to climate-related changes, including sea-level rise. We maintain that

Oceano Dunes SVRA is essential to the conservation of the Pacific Coast WSP.

Lastly, we recognize that the CDPR intensively manages habitat for the Pacific Coast WSP at Oceano Dunes SVRA. We also recognize the difficult balance between the Oceano Dunes SVRA use-mandate and conservation of sensitive species. However, justification of exclusion from critical habitat is not solely based on conservation measures provided by a management plan but on how the benefits of exclusion from critical habitat compare to the benefits of inclusion. We recognize that the CDPR at Oceano Dunes SVRA have been implementing measures to conserve the Pacific Coast WSP and conditions have improved somewhat for the Pacific Coast WSP in critical habitat unit CA-31. We value our current partnership with the CDPR in conserving sensitive species and their habitats; however, after considering the relevant impacts being incurred by the Pacific Coast WSP, we did not conclude that the benefits of excluding Oceano Dunes SVRA lands in unit CA-31 outweigh the benefits of including those lands as critical habitat. In addition, as mentioned in the CDPR comment letter, the CDPR is experiencing severe funding limitations. Consequently, the CDPR may not be able to guarantee that the Oceano Dunes SVRA management plan will be implemented in the future. For these reasons, the Secretary is declining to exercise his discretion to exclude Oceano Dunes SVRA lands from unit CA-31.

Public Comments

The majority of the public comments we received were form letters regarding

Oceano Dunes SVRA. The 104 form letters did not provide substantial information, and were analogous to a “vote” not to designate critical habitat at Oceano Dunes SVRA. For information on our determination on critical habitat for the Oceano Dunes SVRA, please see *Comment 14* above.

(15) *Comment:* Several commenters proposed models other than the ones we used relative to sea-level rise. We also received comments challenging the likelihood of sea-level rise. Some commenters stated that sea-level rise could not be attributed to human-caused actions and that we should not be managing for an impact (*i.e.*, sea-level rise) that might not occur. Others commenters stated that there is no “global warming” occurring, and that the Service is not considering the best science available.

Our Response: The Service considers climate change the single greatest conservation challenge of the 21st century, and as a result we have developed a draft strategic plan to address climate change (Service 2009, pp. 1–32). We acknowledge climate change is a complex issue, and there may be some uncertainty over all the causes and precise manifestations of climate change (see *Climate Change* section above). Given these uncertainties, one objective of this revised final rule is to identify and protect those habitats that we determine will provide resiliency for Pacific Coast WSP in the face of the effects of climate change on habitat. We will undoubtedly have to adapt management approaches as we learn more. We agree that Pacific Coast WPS management actions should stem the impacts of climate change where opportunities to do so exist.

We evaluated the models proposed by the commenters, and in some instances, we acknowledge that these models have more detail, often resulting from site-specific information. However, that site specificity could not be incorporated into a model that would assess the species' habitat rangewide because there is insufficient corresponding data from all sites across the entire range of the Pacific Coast WSP (*i.e.*, from Washington to the Mexican border in California). Other models proposed by commenters used different parameters than the models we employed, and thus, could not be used consistently. The models we selected reflected conditions across the range for the Pacific Coast WSP. Because we anticipated that use of models would be controversial, we chose to use those developed or accepted by the Department of the Interior.

We intentionally did not address the cause(s) for sea-level rise in our revised proposed rule (76 FR 16046; March 22, 2011), as it is subject to debate in many forums outside this critical habitat designation process. However, there are ample data to support that sea-level rise is occurring, and it will continue into the future. The models we used provide perspective on the extent and time at which we can expect sea-level rise to occur (refer to *Climate Change* section above).

(16) *Comment:* Two commenters questioned the need to list the Pacific Coast WSP as threatened.

Our Response: As noted above in response to Comment 7, this finding does not

address whether the Pacific Coast WSP should be listed, but rather concerns whether revisions should be made to critical habitat for the Pacific Coast WSP. See 71 FR 20607 (April 21, 2006) for information on the listing of the Pacific Coast WSP.

(17) *Comment:* Three commenters believe that we underestimate the impacts of predation, and overstate the effects of human-caused disturbance.

Our Response: Predation is a leading cause of Pacific Coast WSP adult, chick, and egg mortality; however, the significance of predation varies by site. With the influx of common ravens to Santa Barbara, San Luis Obispo, Monterey, and Santa Cruz Counties to coastal habitat since the late 1990s, predation pressure has increased in some areas. Predator management, both nonlethal and lethal, has been effective at many sites. Predator management is generally considered a recovery action, outside the process for designating critical habitat (Page *et al.* 2008, pp. 1–11).

Regarding human disturbance and effects to Pacific Coast WSP, there is a relationship between human beach use and predation. Disturbance associated with human beach use can result in Pacific Coast WSPs flushing from their nest. When this occurs, the birds leave tracks in the sand, and those foot tracks can lead predators to the nest and result in egg loss. Also, unmanaged or poorly managed trash associated with a variety of uses, including recreational use, can also attract potential predators to beach habitats. Gulls, ravens, and crows are known Pacific Coast WSP predators and are good examples of species that are attracted to areas with improper trash management practices.

Outreach and education focusing on these human-associated concerns will assist in reducing predator interaction with the Pacific Coast WSP.

Pacific Coast WSPs can withstand some disturbance. Their tolerance to disturbance will vary by site (see our response to Comment 18 below), and may vary by the individual experience of a single bird. Disturbance can come from both predators and human-caused sources.

(18) *Comment:* Comments regarding the primary constituent elements (PCEs) were wide-ranging. Some commenters stated that the “minimal disturbance” element limited the Service’s selection of potential units, while other commenters asserted that several units should not be designated due to too much disturbance. One commenter suggested that “minimal disturbance” is better considered under **Special Management Considerations**.

Our Response: We generally consider that there are three generalized threats, or limiting factors, to conservation and recovery of the Pacific Coast WSP. Specifically, we consider limiting factors to conservation to be: (1) Predation; (2) habitat loss and degradation; and (3) disturbance. These three factors may vary in importance by site, and their sequence here should not indicate a priority or level of importance.

For the Pacific Coast WSP, there are natural and human-caused disturbances that affect the species and its habitat. Pacific Coast WSPs respond differently to disturbance

depending on the type of disturbance, its frequency, and the timing of the disturbance. By way of example, breeding Pacific Coast WSPs appear to be more sensitive to disturbance than wintering plovers. Pacific Coast WSPs are more likely to flush from, or abandon, a nest during the early incubation stages. They are less likely to abandon a nest as eggs approach hatching, presumably because a significant time has been spent incubating and defending the nest. Human presence at isolated beaches on Vandenberg Air Force Base, for example, can result in Pacific Coast WSPs flushing at a greater distance than plovers at Oceano Dunes SVRA, where they are subject to greater disturbance and have the ability to “habituate.” Vandenberg and Oceano Dunes SVRA are only approximately 30 mi (48 km) apart. Consequently, disturbance is “relative” to site conditions. Minimal disturbance is a PCE because it is a component of a unit’s suitability and should be considered in Pacific Coast WSP conservation, and therefore, in critical habitat designation. The amount, timing, and extent of disturbance may be best addressed as a special management consideration. We considered sites with a range of disturbance, and each site designated is regionally important.

(19) *Comment:* One commenter stated that the Service is constraining critical habitat protection by using criteria not consistent with the Act. Specifically, use of criteria other than the PCEs limits the Service’s ability to designate habitat.

Our Response: Stating our selection criteria and methods is necessary for public disclosure (refer to *Methods Used to Designate Critical Habitat* and *Physical and Biological Features* sections). The selection criteria relate to how we determine where

the PCEs, or elements of physical and biological features that are essential to the conservation of the Pacific coast WSP, are on the landscape. Therefore, our selection criteria define how we determined “essential areas” for designation of critical habitat.

(20) *Comment:* One commenter suggested that we include habitat buffers in our designation.

Our Response: The Act does not provide for us to designate buffer habitat. We are directed by section 4 of the Act to designate only those specific areas determined to be either essential to or for the conservation of the species. The areas identified as critical habitat within units that are not occupied, and may be unsuitable at the present, still meet the definition of critical habitat as they will play a role in Pacific Coast WSP conservation as sea-level rise occurs. These areas are not considered buffers.

(21) *Comment:* One commenter raised issues with the increase in unit size on their lands from the 2005 designation. Other landowners that are within proposed critical habitat units, but have property at some distance from the water’s edge, questioned the need to designate their properties as critical habitat for the Pacific Coast WSP.

Our Response: In many instances, the units are wider in this rule than designated in 2005, because we anticipate sea-level rise and want to ensure there remains adequate critical habitat following inundation. It is difficult to determine where the effects of sea-level rise will be the most significant, because we expect beach morphology or habitat

characteristics to change. Inland expansion of unit boundaries (generally eastward) beyond those in the 2005 designation are expected to offset potential adverse effects of sea-level rise.

Our maps and unit descriptions indicate a westward increase in unit boundaries for this rule in many cases. The inclusion of the intertidal zone is a function of better mapping and the updated National Agriculture Imagery (NAIP) used for this rule, as well as our desire to use the “water’s edge” as a boundary. The intertidal zone plays an important role in providing the physical and biological features of most of the designated units. As a consequence, the intertidal zone is included in our designation where appropriate. Having the water’s edge as the westward, or ocean-side boundary, gives a clear demarcation of the unit boundary when actually visiting the site.

Other expansions of unit boundaries beyond those in the 2005 designation occurred as a result of using new information that better identifies the physical or biological features essential to Pacific Coast WSP. Thus, the new unit boundaries were drawn using the best scientific information available to the Service.

(22) *Comment:* Two commenters believe the Service violated both the Act and Administrative Procedure Act by failing to adequately detail the difference in the revised proposed rule over the 2005 designation.

Our Response: In the revised proposed rule, we outlined our methods and

explained differences between the prior September 2005 final rule and the March 2011 revised proposed rule in the **Summary of Changes From Previously Designated Critical Habitat** section (76 FR 16054; March 22, 2011). We changed the methods used to designate critical habitat because of the need to address sea-level rise and provide conservation of the species and its habitat based on the 2007 Recovery Plan for the species. These changes resulted in the proposed revision to designated critical habitat and the proposed designation of additional areas as critical habitat, and in some cases, a proposed expansion in the size of areas designated in 2005.

We also reviewed the areas excluded from the 2005 final critical habitat designation based upon section 4(b)(2) of the Act. Our March 22, 2011, revised proposal of critical habitat did not include any proposed exclusions, but we did request public comment as to whether any specific areas being proposed as revised critical habitat should be excluded under section 4(b)(2) of the Act. Based on comments received on the 2011 revised proposed rule and our analysis conducted pursuant to the Act, in this revised final designation we have excluded several areas (see *Application of Section 4(b)(2) of the Act* and **Exclusions** sections below). Because of these exclusions and other modifications to various units, as described elsewhere in this rule, the areas included in this final revised critical habitat designation differ from those proposed in March 2011. The methodology and process used to calculate acreage was discussed in the proposed revised rule (and herein), and there has been no deviation from that process.

(23) *Comment:* Two commenters believed the Service violated the

Administrative Procedure Act and the Act by failing to provide adequate notice of the extent of critical habitat. Specifically, commenters believe the maps provided in the revised proposed rule were inadequate.

Our Response: The critical habitat maps are coarse, compared to detailed land ownership. However, the Geographical Information System (GIS) layers for the unit polygons were posted on the Arcata Fish and Wildlife Office website, and were available for downloading during the public comment periods. The availability of the GIS data complies with both the Administrative Procedure Act and the Act. We notified landowners, informing them that critical habitat was being proposed for designation on lands in coastal areas from Washington to southern California. Because of the scale of the revised proposed designation, some individual landowners may have been missed, but we made a good faith effort to reach all those that could be identified at the time of the proposal. We also were available upon request to go over maps as needed and were directly contacted by several landowners that sought clarification of ownership during the open public comment periods.

(24) *Comment:* Two commenters stated that the Service failed to adequately explain why retaining all previously designated critical habitat is essential.

Our Response: By court settlement, the Service agreed to conduct a rulemaking to consider potential revisions to the 2005 critical habitat designation. Our *Methods* and *Criteria Used To Identify Critical Habitat* sections in the 2011 revised proposed rule

explain how we selected areas essential to and for the conservation of the species. The methods applied in 2011 were similar to those used in the 2004 proposed rule and 2005 final rule. Each unit in this designation contains a description explaining how it meets the Act's definition and our criteria for designation as critical habitat.

Our revised final designation varies from the 2005 rule. There are exclusions and exemptions in this revised final rule that were not in the previous rule (refer to our sections on **Summary of Changes from the Revised Proposed Rule**).

(25) *Comment:* Two commenters suggested that the Service violated the Act by proposing units that were not occupied at the time of listing.

Our Response: Critical habitat is defined under section 3 of the Act as (1) the specific areas within the geographical area occupied by a species, at the time it was listed in accordance with the Act, on which are found those physical or biological features (a) essential to the conservation of the species, and (b) which may require special management considerations or protection; and (2) the specific areas outside the geographical area occupied by a species at the time it was listed, upon a determination that such areas are essential for the conservation of the species. Some units are designated based on this second prong; these units, such as WA 1, were not occupied at the time of listing but have been determined to be essential for the conservation of the species.

In addition, some units included in this designation may not be occupied year-round. However, they are essential for conservation because they constitute important wintering sites where breeding does not occur, or important breeding sites. Unit CA 9 is an example of a unit designated for its importance as wintering site.

Unit OR 12 is designated because, although it is unoccupied, it serves an essential role in conservation by connecting other units and thus facilitating Pacific Coast WSP movement from site to site depending on habitat availability, allowing additional foraging or wintering opportunities. This site is expected to play an important role as sea-level rise inundates other sites. The site is identified in the 2007 Recovery Plan as a recovery site.

(26) *Comment:* One commenter stated that the Service violated the Information (Data) Quality Act because the revised proposed rule is not clear regarding the science used to develop the rule.

Our Response: The revised proposed rule, and this final revision to critical habitat, are in fact clear in describing the science used to develop the rule. In our *Background and Critical Habitat—Methods Used to Designate Critical Habitat* sections, we discuss the types of information used to develop the designation, as well as the models, mapping techniques, and other materials used to develop the revised proposed rule. We selected models and data that could be consistently used throughout the Pacific Coast WSP's range, and avoided site-specific models and data that would be more

difficult to obtain.

(27) *Comment:* One commenter stated that the public should be able to review input from peer reviewers.

Our Response: Peer review is conducted concurrently with the public comment period. Peer reviewers are provided the same information as the public; however, because of their experience with the species or similar species, they are asked to provide a detailed review. Typically, their response is provided by the closing date of the public comment period; therefore, there is no opportunity for the public to comment on peer-review input. Peer-reviewer input has been summarized in this rule, but the full text is available upon request at the Arcata Fish and Wildlife Office (see **ADDRESSES** section).

(28) *Comment:* Some commenters provided Pacific Coast WSP use information for sites that were not proposed for designation. Specifically, sites in Oregon and the Monterey Bay region of California were referenced. Commenters felt that the Service did not fully consider all sites, stating that the omitted sites provide connectivity and thus value to critical habitat.

Our Response: We proposed sites that have regional and rangewide importance. Many sites in northern California have comparatively little Pacific Coast WSP use relative to sites both to the north and to the south. However, we are designating those

sites because of the large gap in breeding and wintering Pacific Coast WSPs from southern Sonoma County, California, to New River in Oregon. The fluctuation in the breeding population and the connectivity value of the sites within a large gap in the Pacific Coast WSP's range justifies their inclusion in designation.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species.

(29) *Comment:* A commenter in Washington expressed concern that beach nourishment at Shoalwater Bay by the USACE would impact designated critical habitat. Additional, detailed information was provided by another commenter during the second comment period for the same unit, related to the USACE's beach nourishment project.

Our Response: These comments raise issues related to section 7 of the Act, which requires that Federal agencies ensure that their actions do not jeopardize species or adversely modify or destroy designated critical habitat. If the USACE engages in beach nourishment projects at Shoalwater Bay, such actions may require consultation with the Service to determine the project's effects on Pacific Coast WSP and on designated critical habitat (refer to **Effects of Critical Habitat Designation—Section 7 Consultation**).

(30) *Comment:* Private landowners from all three States raised concerns that designation of critical habitat on their property would prevent use of their land and adjacent land. Several believe the designation would increase regulation and curtail development and enjoyment. Some municipalities expressed similar concerns.

Our Response: A critical habitat designation may result in limitations to land use only in association with land use or management practices that require a Federal permit, Federal funding, or discretionary action by a Federal agency (*i.e.*, a Federal nexus). If a project requires such Federal involvement, then the action and its effects to the Pacific Coast WSP and its designated critical habitat would be evaluated under section 7 of the Act (refer to **Effects of Critical Habitat Designation—Section 7 Consultation**). Actions that do not have a Federal nexus may continue, provided there is no take of Pacific Coast WSPs. If take of Pacific Coast WSPs is anticipated, an individual may seek an incidental take permit from the Service for the Pacific Coast WSP on the lands where the action is to occur. The designation of critical habitat does not affect a non-Federal action.

(31) *Comment:* Two commenters reported on the importance of certain sites in Sonoma County, California, specifically Salmon Creek Beach and Doran Spit.

Our Response: We agree that the Salmon Creek Beach and Doran Spit sites are important to Pacific Coast WSP conservation. However, their overall importance relative to other sites within Recovery Unit 4 (refer to the Recovery Plan; Service 2007) is not as

great. Breeding is variable at both Salmon Creek Beach and Doran Spit, as well as at more northern sites (e.g., CA 8, Manchester Beach). Monitoring of the sites will continue, and the Service will work with beach managers to implement appropriate recovery actions that will further conservation of the Pacific Coast WSP at these sites.

(32) *Comment:* Four commenters questioned why critical habitat was not proposed for Ocean Beach, Pacifica State Beach, and Gazos Creek in San Francisco and San Mateo Counties. Commenters also expressed the importance of Laguna Creek State Beach and Seabright State Beach, noting their collective importance.

Our Response: We agree that these sites are important to Pacific Coast WSP conservation. However, the potential of these sites as breeding areas is lower than that of the sites we designated for breeding (see the *Criteria Used To Identify Critical Habitat* section below) (Service 2007, pp. B9–B12; Service 2011, p. 16053). Similarly the numbers of wintering birds supported by the suggested sites is lower than that of the sites we designated for wintering alone, and wintering needs are also met by many of the sites designated for breeding. The suggested areas also do not strongly advance the goals of increasing diverse habitat, maintaining connectivity, or utilizing restored areas for plover conservation. However, monitoring of the suggested sites will continue, and we will work with beach managers to implement appropriate recovery actions that will further conservation of the Pacific Coast WSP at these sites.

(33) *Comment:* One commenter “petitioned” for exclusions under section 4(b)(2)

of the Act for both Oceano Dunes SVRA, and a 4-ac (2-ha) area near Sand City, California.

Our Response: Although there is no 4(b)(2) petition process for exclusions of areas from designation of critical habitat, we have considered the comment in terms of whether Oceano Dunes SVRA and Sand City sites should be excluded from this designation. The commenter cited economic considerations in support of exclusion; these were addressed in the final economic analysis (FEA) for the revised proposed rule (refer to the **Exclusions** section below). The FEA did not identify any disproportionate costs associated with designation of critical habitat at either Oceano Dunes SVRA or the Sand City sites (refer to our response to Comment 14 above, and to “Exclusions based on Economic Impacts” below), and consequently, these sites were not considered for economic exclusions. Moreover, in order for lands to be excluded under section 4(b)(2) of the Act, the benefits of excluding the area must outweigh the benefits of including those lands as critical habitat. In this case, the benefits of excluding the “petitioned” lands do not outweigh the benefits of including those lands (for instance section 7 and 10 obligations under the Act; increased public awareness of Pacific Coast WSP habitat, and potential indirect oversight by State and local governments) in this final revised designation.

(34) *Comment:* Three commenters requested exclusions or partial exclusions to Units CA 38, CA 39, and CA 41 because they believe those areas do not contain the PCEs due to disturbance.

Our Response: Refer to our response to Comment 8 above. Our response to Comment 17 also addresses disturbance.

Comments on the Draft Economic Analysis

Comments on Development

(35) *Comment:* Several commenters expressed concern that the designation of critical habitat within the Sand City coastal zone in Unit CA 22 will create regulatory uncertainty with associated costs for future development projects in the area. Additionally, the California Coastal Commission (CCC) may view the designation of critical habitat as “overriding” the previously approved Sand City local coastal plan (LCP), which allows for the development of two coastal resorts. If these projects do not move forward, jobs and tax revenue that would have been generated by the developments would be lost.

Our Response: As stated in section 4.2.2 of the FEA, we acknowledge that incremental indirect impacts resulting from future litigation or increased scrutiny from State agencies may include denial of development permits for the Sterling-McDonald and Security National Guaranty (SNG) sites in Sand City, Unit CA 22. Due to uncertainty surrounding the likelihood and extent of such indirect impacts, we are unable to quantify any potential impacts. Specifically, such a calculation requires information about both

the probability that current development plans will be affected and the magnitude of impacts, neither of which can be determined at this time, nor directly attributed to the critical habitat designation. The commenter provides estimates of total revenues anticipated to be generated by these projects; however, assuming total loss of these revenues implies that such an impact will occur with 100 percent certainty. It is possible, based on recent litigation concerning the site and limits to the CCC's authority to amend the previously approved local coastal program, development will move forward as planned and not be affected by the designation. Therefore, this analysis does not attempt to quantify these impacts, but notes that such impacts are possible and, if they occur, would be an incremental result of critical habitat designation.

(36) *Comment:* One commenter expressed concern that the SNG development site in Sand City, CA (Unit CA 22), is vulnerable to indirect incremental impacts of the designation. The commenter stated that if critical habitat were designated in this previously excluded area, the development project would be subject to further administrative burden related to review by the CCC. The commenter expressed concern that critical habitat may be used by the CCC or other agencies as a further reason to deny a coastal development permit or other approval, resulting in increased litigation and associated costs.

Our Response: The DEA and FEA acknowledge the potential for increased bility of indirect impacts to SNG due to the designation of critical habitat. The FEA notes that such indirect impacts are possible, and if they occur, may be an incremental

result of critical habitat designation. However, as explained in section 4.2.2 of the FEA, we do not quantify these impacts due to considerable uncertainty surrounding the probability that the development permits will be denied or that the development will face legal action due to the designation of critical habitat. To this point, the commenter provides documentation suggesting that denial of a permit by CCC could be illegal in light of recent court decisions. An assumption that development will not proceed at the site as planned is thus highly speculative.

(37) *Comment:* One commenter requested clarification of the meaning of the phrase “land’s option value for development,” as used in section 4.2.2, paragraph 148, and in Exhibits ES-4 and 4-4, of the DEA.

Our Response: The FEA incorporates clarifying language in section 4.2.2. “Option value” refers to the fact that land values incorporate an expectation of residential or commercial development, in terms of likelihood and timing, and the associated returns to the landowner.

(38) *Comment:* In the context of the indirect impacts to SNG development, a commenter stated that it is not helpful or meaningful to characterize economic impacts as indirect because the term may suggest that indirect impacts are of lesser magnitude than direct impacts.

Our Response: As described in section 2.4.2 of the FEA, the designation of

critical habitat may, under certain circumstances, affect actions that do not have a Federal nexus and thus are not subject to the provisions of section 7 under the Act. Indirect incremental impacts are those unintended changes in behavior that may occur outside of the Act, through other Federal, State, or local actions, and that may be caused by the designation of critical habitat. The FEA does not intend to diminish the magnitude of such impacts by calling them indirect. The FEA may not quantify indirect impacts in some instances due to the considerable uncertainty surrounding their likelihood and magnitude.

(39) *Comment:* One commenter requested that the Service utilize the estimate of economic impacts for Unit CA 22 contained in the 2005 economic analysis when making a decision to exclude units from critical habitat designation under section 4(b)(2) of the Act.

Our Response: The 2005 economic analysis was developed under a co-extensive framework, which considered and quantified both baseline costs, as well as incremental impacts of the designation. As described in sections 2.1 and 2.2 (as well as in Exhibit 2-1), the 2011 DEA distinguishes the incremental costs of designation from baseline costs, whereas the 2005 economic analysis evaluated all Pacific Coast WSP (baseline and incremental) conservation costs collectively. That is, the impacts estimated in the 2005 Economic Analysis captured costs of Pacific Coast WSP conservation regardless of whether they resulted specifically from critical habitat designation or from other Federal, State, or local regulations. The 2011 DEA instead characterizes all potential future

Pacific Coast WSP conservation as either baseline (expected to occur even without the designation of critical habitat) or incremental (expected to occur only if critical habitat is designated). The FEA qualitatively discusses baseline Pacific Coast WSP conservation and quantifies the incremental impacts.

The identification and estimation of incremental impacts is consistent with direction provided by the Office of Management and Budget (OMB) to Federal agencies for the estimation of the costs and benefits of Federal regulations (see OMB, Circular A-4, 2003). It is also consistent with several recent court decisions, including *Cape Hatteras Access Preservation Alliance v. U.S. Department of the Interior*, 344 F. Supp. 2d 108 (D.D.C.); *Center for Biological Diversity v. U.S. Bureau of Land Management*, 422 F. Supp. 2d 1115 (N.D. Cal. 2006); *Home Builders Association of Northern California v. United States Fish and Wildlife Service*, 616 F.3d 983 (9th Cir. 2010), cert. denied, 179 L. Ed 2d 301, 2011 U.S. Lexis 1392, 79 U.S.L.W. 3475 (2011); and *Arizona Cattle Growers v. Salazar*, 606 F. 3d 1160 (9th Cir. 2010), cert. denied, 179 L. Ed. 2d 300, 2011 U.S. Lexis 1362, 79 U.S.L.W. 3475 (2011). These decisions found that estimation of incremental impacts stemming solely from the designation is proper.

(40) *Comment:* One commenter asserted that additional administrative burden and project modifications are necessary under the Act for a USACE beach nourishment project in subunit WA 3B due to the Pacific Coast WSP's recent colonization of subunit WA 3B.

Our Response: The FEA includes the estimated administrative cost of section 7 consultation related to this beach nourishment project in subunit WA 3B. As described in section 4.2.5 of the FEA, due to the designation of critical habitat, this project's previous informal consultation will need to be reinitiated in 2012, to consider the adverse modification standard. This project is short-term and occurs in a critical habitat unit occupied by the Pacific Coast WSP, but could have permanent impacts on critical habitat. The analysis assumes that no project modifications would be necessary to avoid adverse modification of critical habitat in addition to what has already been proposed to reduce impacts to the Pacific Coast WSP. However, until the section 7 analysis is complete, it remains unknown if an adverse modification determination will be the resultant outcome.

(41) *Comment:* Although the revised critical habitat does not overlap any areas currently used for recreation in subunit CA 55B (Coronado Beach), a commenter expressed concern that the designation of critical habitat could impact future recreation activities in the subunit. These activities included lifeguarding activities, beach access, and construction of a bike path and pedestrian trail. The commenter also expressed concern that a popular dog beach north of the critical habitat designation in subunit CA 55B could be affected by critical habitat.

Our Response: If there is a Federal nexus, the future construction of a bike path and pedestrian trail could result in section 7 consultation with the Service if the project may affect Pacific Coast WSPs or designated critical habitat. Costs associated with this consultation have been added to section 4.2.1 of the FEA; however, these costs would be

incurred only if activities are subject to a Federal nexus. Because subunit CA 55B is considered occupied by the Pacific Coast WSP and these projects are considered long-term activities, the incremental impacts associated with these projects are limited to the administrative cost of addressing the adverse modification standard during consultation.

The lifeguard facilities and activities are not part of a Federal action, and therefore, would not involve an adverse modification analysis for critical habitat under section 7 of the Act. As the dog beach to the north of subunit CA 55B is not part of this designation as critical habitat, the FEA does not consider impacts to activities occurring at this beach.

Comments on Recreation

(42) *Comment:* A commenter stated that if the open riding and camping area of Oceano Dunes SVRA was to be restored to support the PCEs identified in the revised proposed critical habitat rule, there would be substantial adverse economic impacts. The commenter asserted that restoration of PCEs in this area would require eliminating camping and off-highway vehicle (OHV) riding opportunities in 563 ac (228 ha), or approximately one third of the area currently open to riding.

Our Response: Activities at Oceano Dunes SVRA are not currently subject to a Federal nexus. Because critical habitat only applies to activities implemented by a Federal agency or that require Federal authorization or funding, we do not expect the

operations of the park to change due to critical habitat designation. As noted in section 4.2.1 of the FEA and Exhibits ES-4 and 4-4, indirect impacts to Oceano Dunes SVRA are possible, but the analysis does not quantify the impacts due to considerable uncertainty surrounding the probability that the CCC will alter its current permit or Oceano Dunes SVRA will face legal action due to the designation of critical habitat. The FEA notes, however, that such impacts are possible, and if they were to occur, they would be considered incremental results of the designation.

(43) *Comment:* One commenter asserted that the revised proposed critical habitat rule fails to consider the economic impacts of this rule on operations and recreational opportunities in Oceano Dunes SVRA. The commenter expressed concerns that the revised critical habitat designation could result in significant delays to crucial visitor-service efforts or resource management efforts, including the placement of new restrooms, restoration of sensitive vegetation islands, and regular maintenance of perimeter fence to prevent trespass of vehicles into closed areas or adjacent private property. The commenter asserted that the additional time necessary to undertake section 7 consultation could jeopardize projects, jeopardize project funding, and result in significant loss of recreational opportunities in Oceano Dunes SVRA. Loss of recreational opportunities would, in turn, result in significant loss of income for local businesses and the local economy. Two commenters submitted an economic analysis prepared for the California Department of Parks and Recreation, Off Highway Motor Vehicle Recreation Division, estimating the overall economic contribution of Oceano Dunes SVRA to be \$171 million annually.

Our Response: Our analysis notes in section 4.2.1 of the FEA and in Exhibits ES-4 and 4-4 that reducing or eliminating the area available for riding at Oceano Dunes SVRA would result in welfare losses and regional economic impacts. Beach users would incur social welfare losses due to forgone trips or a diminished beach experience (for example, due to crowding). In addition, regional economic impacts arise due to reductions in beach recreation-related expenditures caused by fewer recreation-related trips. The regional economic impacts that could result from reducing or eliminating the riding area would represent some portion of the \$171 million annual economic impact of Oceano Dunes SVRA estimated by the commenter.

However, activities on Oceano Dunes SVRA are not currently subject to a Federal nexus. Therefore, the Service does not expect the operations of the park to change due to critical habitat designation, nor does it expect administrative impacts (or delays) associated with undertaking section 7 consultation. As we note in section 4.2.1 of the FEA and in Exhibits ES-4 and 4-4, indirect impacts to Oceano Dunes SVRA are possible, but the analysis does not quantify the impacts due to considerable uncertainty surrounding the probability that the CCC will alter its current permit or that Oceano Dunes SVRA will face legal action due to the designation of critical habitat. In addition, the area within Oceano Dunes SVRA within Unit CA 31 is occupied by both breeding and wintering Pacific Coast WSP, and as a result any project modifications that may take place would be a result of having to avoid take of the species and not because of the designation of critical habitat and would be considered baseline impacts of the

designation.

(44) *Comment:* A commenter expressed concern that the designation of critical habitat could impact beach management activities, tourism, and, in turn, tax revenues in the City of Santa Barbara.

Our Response: Section 4.2.2 of the FEA describes expected economic impacts related to dredging and beach nourishment projects in Unit CA 35, Santa Barbara Beaches. This section acknowledges the potential for administrative impacts to semi-annual beach management activities caused by the designation of critical habitat for the Pacific Coast WSP. Beach nourishment projects in this unit are not likely to incur incremental project modifications, as they are short-term and temporary in nature. As Unit CA 35 is occupied by the Pacific Coast WSP, any project modifications proposed in this unit would be due to the presence of the Pacific Coast WSP and are considered baseline impacts of the designation. Therefore, the designation of critical habitat is not expected to impact beach access, tourism, or tax revenues in the City of Santa Barbara.

(45) *Comment:* One commenter expressed concern that the designation of critical habitat on Los Angeles County beaches (CA 43, CA 44, CA 45A–D) could impact future recreational activities and daily maintenance operations, such as beach raking and sanitizing sandy beaches, collecting trash, cleaning restroom facilities, and maintaining volleyball courts.

Our Response: Unless such recreational and maintenance activities are subject to a Federal nexus, as defined under the section titled **Effects of Critical Habitat Designation**, we do not expect these activities to be affected by designation of critical habitat on Los Angeles County beaches.

Comments on Habitat Management

(46) *Comment:* One commenter asserted that inclusion of proposed units OR 1, OR 2, OR 3, OR 5, and OR 11 generates additional stress on the Oregon Parks and Recreation Department (OPRD) when applying for Federal grants to execute habitat management projects for the plover by creating a Federal nexus where one did not previously exist. The commenter asserted that this Federal nexus needlessly belabors efforts to improve habitat for the plover and forces OPRD and the Service to expend additional staff time addressing items that have already been accounted for in the habitat conservation plan (HCP) process.

Our Response: As stated in the footnote to Exhibit 3-2 of the FEA, and as delineated in Table 3 below, Units OR 1, OR 2, OR 3, OR 4, OR 5, OR 6, OR 12, and OR 13 are considered unoccupied and consultation with the Service would not occur absent critical habitat designation. Unit OR 11 is considered occupied by the Service and therefore, if a Federal nexus exists, consultation may be necessary to address project impacts to the species as well as critical habitat. In the unoccupied units, costs of addressing critical habitat effects during consultation and all administrative costs of

consultation are considered incremental impacts of the designation, regardless of activity duration or the permanency of habitat impacts. Following this methodology, the FEA forecasts costs in Units OR 1 and OR 3 associated with future jetty repair as incremental impacts of the designation. For Units OR 2 and OR 5, we do not foresee projects in these areas, and no specific planned or ongoing projects were identified by the commenter. Therefore, the FEA does not quantify additional impacts related to future OPRD habitat management projects.

Note that most areas covered by OPRD's HCP have been excluded from the revised final critical habitat designation. Consequently, Federal grants obtained by the State and other entities to conduct habitat restoration or other actions in the excluded areas will not require a section 7 critical habitat analysis, unless those activities are to occur in areas not specifically excluded (i.e., within designated critical habitat).

(47) *Comment:* One commenter stated that proposed units CA 55E and CA 55G are managed under the San Diego Bay INRMP, a joint INRMP between the U.S. Navy Southwest Division and the San Diego Unified Port District (Port of San Diego), prepared in the year 2000. The commenter requested that these lands be exempted from critical habitat, similar to the exemption of military lands in the proposed rule.

Our Response: As described under the section titled **Exemptions**, the Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of

natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. As a result to a 2004 amendment to the Act, section 4(a)(3)(B)(i) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.” The Department of Defense (DOD) lands we identified as essential for the conservation of the Pacific Coast WSP within San Diego Bay have been exempted under section 4(a)(3)(B) of the Act. There are two INRMPs covering Navy land in south San Diego County (2002 Naval Base Coronado INRMP and 2000 San Diego Bay INRMP). All exemptions of Navy lands, including those within San Diego Bay, were based on the 2002 Naval Base Coronado INRMP (see **Exemptions** section). The Port of San Diego owns non-DOD lands that are managed using the 2000 San Diego Bay INRMP. Because we have a well-established partnership with the Port of San Diego for Pacific Coast WSP conservation, in this final rule we have excluded, under section 4(b)(2) of the Act, the critical habitat within the plan area that is managed by the Port of San Diego (Subunits CA 55E and CA 55G) (see **Exclusions** section).

Summary of the 2005 Rule

On September 29, 2005 (70 FR 56970), we designated approximately 12,150 ac (4,922 ha) as critical habitat for the Pacific Coast WSP. We included 32 units within

Washington, Oregon, and California. The unit breakdown by State is as follows:

Washington, 3 units (2,526 ac (1,023 ha)); Oregon, 5 units (2,147 ac (869 ha)); and California, 24 units (7,477 ac (3,026 ha)). During our comparison of the 2005 final critical habitat designation and this revised final designation, we discovered that the acreage totals for some units or areas were in error. The totals for areas for the 2005 rule identified within this rule are the correct totals.

Summary of Changes from the Revised Proposed Rule

On March 22, 2011 (76 FR 16046), we proposed to designate 28,261 ac (11,436 ha) of critical habitat for the Pacific Coast WSP in 68 units. On January 17, 2012 (77 FR 2243), we reopened the comment period and made changes to our March 22, 2011, revised proposed rule. Specifically, we announced the availability of the draft economic analysis on our March 22, 2011, revised proposed critical habitat rule (76 FR 16046); identified the taxonomic and nomenclature change for the Pacific Coast WSP; proposed to exempt Vandenberg Air Force Base under provisions in section 4(a)(3) of the Act due to their newly approved INRMP; and proposed changes to Unit CA 46: Bolsa Chica State Beach and Bolsa Chica Reserve. The most significant changes between the March 22, 2011, and January 17, 2012, revised proposed rule and this revised final rule are outlined in Table 2 below and include:

(1) In the document announcing the availability of the DEA (77 FR 2243; January 17, 2012), we stated we were considering exempting the Department of Defense

(DOD) lands at Vandenberg Air Force Base (AFB) within Units CA 32 and CA 33 from the designation of critical habitat based on the April 14, 2011, approved INRMP, which contains conservation measures that protect the Pacific Coast WSP. We have determined that the actions being implemented through the Vandenberg AFB INRMP provide a benefit to the Pacific Coast WSP, and therefore, we are exempting approximately 1,135 ac (459 ha) of DOD land in Units CA 32 and CA 33 under section 4(a)(3) of the Act. For a complete discussion of exemptions under section 4(a)(3) of the Act, see **Exemptions** section below.

(2) During the public comment period on the proposed rule, we received information from the Navy that approximately 8 ac (3 ha) of DOD lands were included in the revised proposed critical habitat within Unit CA 22 in Monterey County, California. The Navy submitted an amended INRMP for these lands. We have reviewed the amended INRMP and have determined that it provides conservation benefits for the Pacific Coast WSP and its habitat. We have exempted the 8 ac (3 ha) of DOD lands from the designation under section 4(a)(3) of the Act, see **Exemptions** section below.

(3) We finalized our exclusion analysis under section 4(b)(2) of the Act. Approximately 3,797 ac (1,537 ha) of habitat are excluded from the revised final critical habitat designation based on this analysis. This represents approximately 16 percent of the habitat that was proposed. See the **Exclusions** section, below, for more information. Approximately 425 ac (172 ha) of tribal lands are excluded from subunit WA 3B, including all land under the jurisdiction of the Shoalwater Bay Tribe. Another 3,309 ac

(1,339 ha) of critical habitat is being excluded under the Oregon Parks and Recreation Department Habitat Conservation Plan, City of San Diego Subarea Plan (under the Multi-Species Conservation Plan) and the Carlsbad Habitat Management Plan (under the Multi-species Habitat Conservation Plan). An additional 63 ac (25 ha) of Port of San Diego managed lands within subunits CA 55E and CA 55G are being excluded based on a management plan for the Pacific Coast WSP and our partnership with the Port. We determined that excluding these lands would not result in extinction of the Pacific Coast WSP, and that the benefits of excluding these lands outweigh the benefits of including them. Consequently, the Secretary is exercising his discretion to exclude approximately 3,797 ac (1,537 ha) of land in Washington, Oregon, and California under section 4(b)(2) of the Act. For a complete discussion of exclusions under section 4(b)(2) of the Act, see **Exclusions** section below.

(4) Based on comments received by the USACE and the public, we revised Unit CA 46, Bolsa Chica State Beach (subunit CA 46A), and Bolsa Chica Reserve (subunits 46E and 46F). The Unit was revised to include approximately 471 ac (191 ha), a net decrease of approximately 34 ac (14 ha) from the proposal. As described in our January 17, 2012, **Federal Register** notice, the new areas identified better reflect lands essential to the Pacific Coast WSP (77 FR 2243).

(5) We received information from the Willapa National Wildlife Refuge (NWR) during development of this final rule regarding habitat suitability to the Pacific Coast WSP at the refuge, and the extent of Federal jurisdiction. As a result, we modified the

unit boundaries for WA 4A, Leadbetter Spit. In the March 2011 proposed rule, WA 4A was identified as having 2,463 ac (997 ha) of habitat meeting criteria for designation as critical habitat (76 FR 16046). Federal jurisdiction goes to ordinary high tide line. The acreage estimate under the proposed rule was incorrect, and the revised unit is approximately 125 ac (50 ha) smaller. In addition, the proposed rule did not account for acreage that was unlabeled in the parcel data, similar to the situation described in point (6) below (see Table 1). Within Subunit WA 4A, approximately 1,713 ac (693 ha) are managed by Washington State and 987 ac (399 ha) are on Willapa National Wildlife Refuge (Federal).

Similarly, Shoalwater Bay Tribe Reservation lands included in Unit WA 3B, Shoalwater/Graveyard Spit, were miscalculated in the revised proposed rule (76 FR 16046). Tribal lands have been recalculated to be 425 ac (172 ha) in this revised final rule, all of which are excluded from designation under 4(b)(2) of the Act (see **Exclusions** section).

(6) During finalization of our critical habitat designation, we discovered inconsistencies in the calculation of some of the acreages for proposed units. The inconsistencies resulted from calculations based on parcel data (i.e. ownership data), which do not contain the intertidal zone and other lands managed by the California State Lands Commission (and the similar agency for Washington). Consequently, those acres were not included in the unit acreage totals in the proposed revised rule. Table 1 lists the affected units.

Maps in the proposed revised rule for the affected units in Table 1 accurately depict the intended unit boundaries, including the unlabeled lands managed by the California State Lands Commission and the State of Washington (76 FR 16046). In addition, our methods discussion in this final revision reflects our decision to use the water's edge as the westward or ocean-side unit boundary (refer to our *Methods Used to Designate Critical Habitat* section, and our response to Comment 4 in the **Summary of Comments and Recommendations** section). This revised final designation includes the intertidal zone and other lands managed by state land commission agencies. Therefore, adequate notice has been provided regarding our intent to designate critical habitat for the Pacific Coast WSP to the water's edge.

(7) There were several discrepancies between text and tables in the 2005 final critical habitat rule for the Pacific Coast WSP (70 FR 56970). The information provided in this revised final rule is compared to the tables in the 2005 revised rule (see **Table 2** below in this rule for comparison). Rounding error remains an issue, and may result in a difference in acreages between tables in this revised final designation and previous rules. However, these differences in acreages are small, and the data provided within this rule remain representative of our designation. Legal descriptions and GIS data layers are available at <http://www.fws.gov/arcata/es/birds/WSP/plover.html>, or upon request to the Arcata Fish and Wildlife Office (see **FOR FURTHER INFORMATION CONTACT** above).

Table 1. Units with discrepancies from parcel data and unit boundary. The difference in

acreage (hectares) is reflected in lands under the jurisdiction of the California State Lands Commission.

Unit Name	Proposed Acres <i>ac (ha)</i>	Total Unit Area Recalculated <i>ac (ha)</i>
WA 4A Leadbetter Spit	2,463 (997)	2,700 (1,093)
CA 2 Gold Bluffs Beach	144 (58)	233 (94)
CA 3A Stone Lagoon	52 (21)	55 (22)
CA 3B Big Lagoon	212 (86)	268 (108)
CA 4A Clam Beach/Little River	194 (79)	337 (136)
CA 5A Humboldt Bay South Spit	419 (170)	572 (231)
CA 5B Eel River North Spit and Beach	259 (105)	464 (188)
CA 6 Eel River Gravel Bars	1,139 (461)	1,349 (546)
CA 7 MacKerricher Beach	1,176 (476)	1,218 (493)
CA 8 Manchester Beach	482 (195)	505 (204)

*Values in table may not sum due to rounding.

Table 2. Changes between the September 29, 2005, Pacific Coast WSP revised critical habitat designation; the March 22, 2011, and the January 17, 2012, revised proposed designation; and this revised final designation. (Acreage values are approximate and may not total due to rounding)

Critical Habitat Unit in this Revised Final Rule	2005 Designation of Revised Critical Habitat in AC/HA		2011 and 2012 Revised Proposed Revisions to the Critical Habitat Designation in AC/HA		2012 Revised Final Critical Habitat Designation in AC/HA	
<i>Washington</i>						
	AC	HA	AC	HA	AC	HA
WA 1 Copalis Spit			407	165	407	165
WA 2 Damon Point	908	368	673	272	673	272
WA 3A Midway Beach	786	318	697	282	697	282

Critical Habitat Unit in this Revised Final Rule	2005 Designation of Revised Critical Habitat in AC/HA		2011 and 2012 Revised Proposed Revisions to the Critical Habitat Designation in AC/HA		2012 Revised Final Critical Habitat Designation in AC/HA	
			AC	HA	AC	HA
WA 3B Shoalwater/Graveyard Spit			1121	454	696	282
WA 4A Leadbetter Spit	832	337	2463	997	2700	1093
WA 4B Gunpowder Sands Island			904	366	904	366
Washington Totals:	2526	1022	6265	2535	6077	2459
Oregon						
	AC	HA	AC	HA	AC	HA
OR 1 Columbia River Spit			169	68	Excluded under 4(b)(2)	
OR 2 Necanicum River Spit			211	85	11	4
OR 3 Nehalem River Spit			299	121	Excluded under 4(b)(2)	
OR 4 Bayocean Spit	207	84	367	149	201	82
OR 5 Netarts Spit			541	219	Excluded under 4(b)(2)	
OR 6 Sand Lake South			200	81	5	2
OR 7 Sutton/Baker Beaches	260	105	372	151	276	112
OR 8A Siltcoos Breach	8	3	15	6	15	6
OR 8B Siltcoos River Spit	527	213	241	97	116	47
OR 8C Dunes Overlook/Tahkenitch Creek Spit			716	290	383	155
OR 8D North Umpqua River Spit			236	95	59	24
OR 9 Tenmile Creek Spit	235	95	244	99	223	90
OR 10 Coos Bay North Spit	278	113	308	125	273	111
OR 11 Bandon to New River	632	256	1016	411	541	219
OR 12 Elk River Spit			167	68	Excluded under 4(b)(2)	
OR 13 Euchre Creek Spit			116	47	9	4
Oregon Totals:	2147	869	5218	2112	2112	855
California						
	AC	HA	AC	HA	AC	HA
CA 1 Lake Earl	57	24	74	30	74	30
CA 2 Gold Bluffs Beach			144	58	233	94
CA 3A Stone Lagoon			52	21	55	22
CA 3B Big Lagoon	280	113	212	86	268	108

Critical Habitat Unit in this Revised Final Rule	2005 Designation of Revised Critical Habitat in AC/HA		2011 and 2012 Revised Proposed Revisions to the Critical Habitat Designation in AC/HA		2012 Revised Final Critical Habitat Designation in AC/HA	
CA 4A Clam Beach/Little River	155	63	194	79	337	136
CA 4B Mad River Beach	377	153	456	185	452	183
CA 5A Humboldt Bay South Spit	375	152	419	170	572	231
CA 5B Eel River North Spit and Beach	283	114	259	105	464	188
CA 5C Eel River South Spit and Beach	402	163	339	137	336	136
CA 6 Eel River Gravel Bars	1193	483	1139	461	1349	546
CA 7 MacKerricher Beach	1048	424	1176	476	1218	493
CA 8 Manchester Beach	341	138	482	195	505	204
CA 9 Dillon Beach			39	16	39	16
CA 10A Point Reyes	462	187	460	186	460	186
CA 10B Limantour	124	50	156	63	156	63
CA 11 Napa-Sonoma			618	250	618	250
CA 12 Hayward			1	0	1	0
CA 13A Eden Landing			237	96	237	96
CA 13B Eden Landing			171	69	171	69
CA 13C Eden Landing			609	246	609	246
CA 14 Ravenswood			89	36	89	36
CA 15 Warm Springs			168	68	168	68
CA 16 Half Moon Bay	37	15	36	15	36	15
CA 17 Waddell Creek Beach	9	4	25	10	25	10
CA 18 Scott Creek Beach	19	8	23	9	23	9
CA 19 Wilder Creek Beach	10	4	15	6	15	6
CA 20 Jetty Road to Aptos			399	161	399	161
CA 21 Elkhorn Slough Mudflats	281	114	281	114	281	114
CA 22 Monterey to Moss Landing			967	391	959	388
					8 ac (3 ha) Exempt under 4(a)(3)	
CA 23 Point Sur Beach	61	25	72	29	72	29
CA 24 San Carpoforo Creek			24	10	24	10
CA 25 Arroyo Laguna Creek			28	11	28	11
CA 26 San Simeon State Beach	28	11	24	10	24	10
CA 27 Villa Creek Beach	17	7	20	8	20	8
CA 28 Toro Creek			34	14	34	14

Critical Habitat Unit in this Revised Final Rule	2005 Designation of Revised Critical Habitat in AC/HA		2011 and 2012 Revised Proposed Revisions to the Critical Habitat Designation in AC/HA		2012 Revised Final Critical Habitat Designation in AC/HA	
CA 29 Atascadero Beach/Morro Strand State Beach			213	86	213	86
CA 30 Morro Bay Beach			1076	435	1076	435
CA 31 Pismo Beach/Nipomo Dunes			1652	669	1652	669
CA 32 Vandenberg North			711	288	Exempt under 4(a)(3)	
CA 33 Vandenberg South			424	172	Exempt under 4(a)(3)	
CA 34 Devereaux Beach	36	15	52	21	52	21
CA 35 Santa Barbara Beaches			65	26	65	26
CA 36 Santa Rosa Island Beaches			586	237	586	237
CA 37 San Buenaventura Beach			70	28	70	28
CA 38 Mandalay Beach to Santa Clara River	350	142	672	272	672	272
CA 39 Ormond Beach	175	71	320	130	320	130
CA 40, CA 41 Mugu Lagoon	87	35	Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 42 San Nicolas Island			Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 43 Zuma Beach	68	28	73	30	73	30
CA 44 Malibu Beach			13	5	13	5
CA 45A Santa Monica Beach	25	10	48	19	48	19
CA 45B Dockweiler North	43	17	34	14	34	14
CA 45C Dockweiler South	24	10	65	26	65	26
CA 45D Hermosa State Beach	10	4	27	11	27	11
CA 46A Bolsa Chica State Beach	4	2	93	38	93	38
CA 46B Bolsa Chica Reserve			2	1	2	1
CA 46C Bolsa Chica Reserve	591	239	222	90	222	90
CA 46D Bolsa Chica Reserve			2	1	2	1
CA 46E Bolsa Chica Reserve			247	100	247	100
CA 46F Bolsa Chica Reserve			2	1	2	1
CA 47 Santa Ana River Mouth	13	5	19	8	19	8
CA 48 Balboa Beach			25	10	25	10
CA 49 San Onofre Beach-Marine Corps Base Camp Pendleton	49	20	Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 50A-C Batiquitos Lagoon	65	26	66	27	Excluded under 4(b)(2)	
CA 51A-C San Elijo Lagoon			15	6	15	6

Critical Habitat Unit in this Revised Final Rule	2005 Designation of Revised Critical Habitat in AC/HA		2011 and 2012 Revised Proposed Revisions to the Critical Habitat Designation in AC/HA		2012 Revised Final Critical Habitat Designation in AC/HA	
Ecological Reserve						
CA 52A San Dieguito Lagoon			4	2	4	2
CA 52B San Dieguito Lagoon			3	1	Excluded under 4(b)(2)	
CA 52C San Dieguito Lagoon			4	2	Excluded under 4(b)(2)	
CA 53 Los Penasquitos Lagoon	24	10	32	13	Excluded under 4(b)(2)	
CA 54A Fiesta Island			2	1	Excluded under 4(b)(2)	
CA 54B Mariner's Point			7	3	Excluded under 4(b)(2)	
CA 54C South Mission Beach			38	15	Excluded under 4(b)(2)	
CA 54D San Diego River Channel			51	21	Excluded under 4(b)(2)	
CA 55A North Island	44	18	Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 55B Coronado Beach			74	30	74	30
CA 55C Silver Strand Beach			Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 55D Delta Beach			Exempt under 4(a)(3)		Exempt under 4(a)(3)	
CA 55E Sweetwater Marsh National Wildlife Refuge and D Street Fill	128	52	132	54	79	32
CA 55F Silver Strand State Beach			82	33	82	33
CA 55G Chula Vista Wildlife Reserve			10	4	Excluded under 4(b)(2)	
CA 55H Naval Radio Receiving Facility			66	27	Exempt under 4(a)(3)	
CA 55I San Diego National Wildlife Refuge South Bay Unit			5	2	5	2
CA 55J Tijuana Estuary and Border Field State Park	182	74	150	61	150	61
California Totals:	7,477	3,026	16,896	6,838	16,337	6,612
Total*	12,150	4,917	28,379	11,485	24,527	9,926

*Values in table may not sum due to rounding.

In summary, this revised final critical habitat designation includes approximately 24,527 ac (9,926 ha) in 60 units, after excluding portions of Units/subunits WA 3B, OR

1–7, OR 8A–D, OR 9–13, CA 50A–C, CA 52B–C, CA 53, CA 54A–D, CA 55E, CA 55G, and CA 55I (approximately 3,797 ac (1,537 ha)) based on consideration of economic, national security, and other relevant impacts (see **Exclusions**). The areas identified in this revised final rule constitute revisions of areas excluded and designated as critical habitat for the Pacific Coast WSP on September 29, 2005 (70 FR 56970), and proposed revisions to that rule published on March 22, 2011 (76 FR 16046) and January 17, 2012 (77 FR 2243). This revised final critical habitat designation includes approximately 6,077 ac (2,460 ha) in 4 units within Washington, approximately 2,112 ac (856 ha) in 9 units within Oregon, and 16,337 ac (6,612 ha) in 47 units within California. Table 2 above outlines the differences between the 2005 final critical habitat rule (70 FR 56970; September 29, 2005), the 2011 and 2012 proposed revisions to the critical habitat designation (76 FR 16046, March 22, 2011; 77 FR 2243, January 17, 2012, respectively), and this revised final critical habitat designation for the Pacific Coast WSP. For more information on the differences between the 2005 critical habitat rule and the 2011 revised proposed critical habitat rule and 2012 amendment, please see the **Summary of Changes From Previously Designated Critical Habitat** section of the revised proposed critical habitat rule published in the **Federal Register** on March 22, 2011 (76 FR 16046), and the **Changes to Proposed Revised Critical Habitat** section of the document published in the **Federal Register** on January 17, 2012 (77 FR 2243).

Critical Habitat

Background

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by a species, at the time it is listed in accordance with the Act, on which are found those physical or biological features:

(a) Essential to the conservation of the species and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by a species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring any endangered or threatened species to the point at which the measures provided under the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance, propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot otherwise be relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the consultation requirements of section 7(a)(2) would apply, but even in the event of a destruction or adverse modification finding, the obligation of the Federal action agency and the landowner is not to restore or recover the species, but to implement reasonable and prudent alternatives to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act's definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. In this final rule, we also designate areas within the Pacific Coast WSP's historical range that may not have been occupied at listing. We designate those areas because we have determined that those areas are essential for the conservation of the species. For both the occupied and unoccupied areas (at the time of listing), critical habitat designation identifies, to the extent known using

the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical and biological features within an area, we focus on the principal biological or physical constituent elements (primary constituent elements such as roost sites, nesting grounds, seasonal wetlands, water quality, tide, soil type) that are essential to the conservation of the species. Primary constituent elements are the elements of physical or biological features that, when laid out in the appropriate quantity and spatial arrangement to provide for a species' life-history processes, are essential to the conservation of the species.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. For example, an area currently occupied by the species but that was not occupied at the time of listing may be essential to the conservation of the species and may be included in the critical habitat designation. We designate critical habitat in areas outside the geographical area occupied by a species only when a designation limited to its range would be inadequate to ensure the conservation of the species.

Section 4 of the Act requires that we designate critical habitat on the basis of the best scientific and commercial data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the Federal Register on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and

General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines, provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information developed during the listing process for the species. Additional information sources may include the recovery plan for the species, articles in peer-reviewed journals, conservation plans developed by States and counties, scientific status surveys and studies, biological assessments, other unpublished materials, or experts' opinions or personal knowledge.

Habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) conservation actions implemented under section 7(a)(1) of the Act, (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to insure their

actions are not likely to jeopardize the continued existence of any endangered or threatened species, and (3) the prohibitions of section 9 of the Act if actions occurring in these areas may affect the species. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of this species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of these planning efforts calls for a different outcome.

Relationship of Critical Habitat to Recovery Planning

Areas that are important to the conservation of the species, but are outside the critical habitat designation, will continue to be subject to conservation actions we implement under section 7(a)(1) of the Act. Areas that support populations are also subject to the regulatory protections afforded by the section 7(a)(2) jeopardy standard, as determined on the basis of the best available scientific information at the time of the agency action. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, HCPs, or other species conservation planning efforts if new information available

at the time of these planning efforts calls for a different outcome.

In developing this revised final rule, we considered the conservation relationship between critical habitat and recovery planning. Although recovery plans formulate the recovery strategy for a species, they are not regulatory documents, and there are no specific protections, prohibitions, or requirements afforded a species based solely on a recovery plan. Furthermore, although critical habitat designation can contribute to the overall recovery strategy for a species, it does not, by itself, achieve recovery plan goals.

In Appendix C of the Recovery Plan (Service 2007), the Service recommends management actions that can be taken by land managers to benefit the conservation of the Pacific Coast WSP. Some actions should be implemented with other measures to maximize the recovery potential. Other recovery actions need to be instituted when conditions change; for example, when there is increased predation, or the type of predator changes. Monitoring and intensive management may be required at some sites.

We expect that there will be an increased need for management (*i.e.*, implementation of recovery actions) as “coastal squeeze” occurs with a rising shift in sea level. A land manager’s response will likely vary by site, depending on the site needs at that time. Additional planning may be required to set priorities to the expected change in habitat condition.

Much information has been collected since the Pacific Coast WSP’s listing as

threatened in 1993. Those data that define life history parameters need to be regularly assessed to gain a better understanding of Pacific Coast WSP survivorship, response to predation and disturbance, and response to changing habitats. A revised population viability analysis (Service 2007, Appendix D) will assist biologists and land managers to understand population movements, and perhaps prioritize areas suitable for intensive management. Cost-effective management at a few, well-distributed sites may assist with long-term Pacific Coast WSP conservation, and allow for the sharing of resources.

Methods

As required by section 4(b)(2) of the Act, we used the best scientific data available in determining areas that contain the features essential to the conservation of the Pacific Coast WSP. Data sources included research published in peer-reviewed articles and previous Service documents on the species. Additionally, we utilized regional Geographic Information System (GIS) shape files for area calculations and mapping (also refer to **Methods** section in the 2011 revised proposed rule published at 76 FR 16046) .

Physical or Biological Features

In accordance with section 3(5)(A)(i) and 4(b)(1)(A) of the Act and regulations at 50 CFR 424.12, in determining which areas within the historical range and geographical area occupied by the species at the time of listing to designate as critical habitat, we consider the physical or biological features essential to the conservation of the species

and which may require special management considerations or protection. These include, but are not limited to:

- (1) Space for individual and population growth and for normal behavior;
- (2) Food, water, air, light, minerals, or other nutritional or physiological requirements;
- (3) Cover or shelter;
- (4) Sites for breeding, reproduction, or rearing (or development) of offspring; and
- (5) Habitats that are protected from disturbance or are representative of the historical, geographical, and ecological distributions of a species.

We derive the specific physical or biological features essential for the Pacific Coast WSP from studies of this species' habitat, ecology, and life history as described in the **Critical Habitat** section of the revised proposed rule to designate critical habitat published in the **Federal Register** on March 22, 2011 (76 FR 16046), and in the information presented below. Additional information can be found in the final listing rule published in the **Federal Register** on March 5, 1993 (58 FR 12864), and the Recovery Plan for the Pacific Coast Population of the Western Snowy Plover (*Charadrius alexandrinus nivosus*) finalized on August 13, 2007 (Service 2007). We have determined that the Pacific Coast WSP requires the following physical or biological features.

Habitats That Are Representative of the Historical Geographical and Ecological Distribution of the Species

The historical range of the Pacific Coast WSP extends from Copalis Spit, Washington, south along the Pacific Coast of Oregon and California to Bahia Magdalena, Baja California, Mexico. The Pacific Coast WSP breeds primarily above the high tide line on coastal beaches, sand spits, dune-backed beaches, sparsely vegetated dunes, beaches at creek and river mouths, and salt pans at lagoons and estuaries. Less common nesting habitats include bluff-backed beaches, dredged material disposal sites, salt pond levees, dry salt ponds, and river bars. In winter, Pacific Coast WSPs are found on many of the beaches used for nesting as well as on beaches where they do not nest, including manmade salt ponds and on estuarine sand and mud flats. Despite the variation in the types of habitat where the Pacific Coast WSP is found, these habitats all share the same general characteristics of typically being flat, open areas with sandy or saline substrates, with usually sparse or absent vegetation or driftwood (Stenzel *et al.* 1981, p. 18; Service 2007).

In addition to the varying habitat types identified above, individual habitat characteristics also vary across the Pacific Coast WSP's range. For example, beach habitats in the southern part of its range are generally characterized by large, flat, open spaces, whereas beach habitats within the northern part of the range (north of Tomales Bay, CA) are smaller, more widely distributed, and often associated with stream mouths, bays, or estuaries. These varying habitat types and availability contribute to the Pacific Coast WSP's ability to maintain its use of coastal areas for breeding and wintering across its range and are considered an essential physical or biological feature for the species.

Space for Individual and Population Growth and for Normal Behavior

Pacific Coast WSPs require space for foraging and establishment of nesting territories. These areas vary widely in size depending on habitat type, habitat availability, life-history stage, and activity. As stated in the **Background** section of the revised proposed designation (76 FR 16046; March 22, 2011), males establish nesting territories that vary from about 0.25 to 2.5 ac (0.1 to 1.0 ha) at interior sites (Page *et al.* 1995, p. 10) and 1.2 ac (0.5 ha) in coastal salt pan habitat, with beach territories perhaps larger (Warriner *et al.* 1986, p. 18). Foraging activities also occur in non-territorial areas up to 5 mi (8 kilometers (km)) from the nesting sites when not incubating. Essential areas must therefore extend beyond nesting territories to include space for foraging during the nesting season and space for overwintering, and to provide for connectivity with other portions of the Pacific Coast WSP's range. Pacific Coast WSPs may overwinter at locations where there is no current breeding, but where breeding may have occurred in the past (*e.g.* Dillon Beach, CA-9). These wintering areas provide important areas for overwinter survival, provide protections for historical nesting areas, and allow for connectivity between sites. These open areas also allow plovers to fully utilize their camouflage and running speed to avoid predators and to catch prey. Based on the information above, we identify areas surrounding known breeding and wintering areas containing space for nesting territories, foraging activities, and connectivity for dispersal and nonbreeding or nesting use to be a physical or biological feature needed by this species.

Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements

Pacific Coast WSPs typically forage in open areas by locating prey visually and then running to seize it with their beaks (Page *et al.* 1995, p. 12). They may also probe in the sand for burrowing invertebrates, or charge flying insects that are resting on the ground, snapping at them as they flush. Accordingly they need open areas in which to forage, to facilitate both prey location and capture. Deposits of tide-cast wrack such as kelp or driftwood tend to attract certain invertebrates, and so provide important foraging sites for plovers (Page *et al.* 1995, p. 12). Pacific Coast WSPs forage both above and below high tide, but not while those areas are underwater. Foraging areas will therefore typically be limited by water on their shoreward side, and by dense vegetation or development on their landward sides. Therefore, we have identified open, sandy areas which may contain tide-cast wrack or other vegetative debris to attract prey as a physical or biological feature needed by this species.

Pacific Coast WSPs use sites of freshwater for drinking where available, but some historical nesting sites, particularly in southern California, have no obvious nearby freshwater sources. Adults and chicks in those areas must be assumed to obtain their necessary water from the food they eat. Accordingly we have not included freshwater sites as a physical or biological feature for the species.

Cover or Shelter

Pacific Coast WSPs occupy open beach or similar areas for the majority of their life functions. Such open areas provide little cover or shelter from predators, human disturbance, winds, storms, and the extreme high tides associated with weather events, and these conditions cause many nest losses. Pacific Coast WSPs and their eggs are well camouflaged against light colored, sandy or pebbly backgrounds (Page *et al.* 1995, p. 12), so open areas with such substrates actually constitute shelter for purposes of nesting. Chicks may also crouch near driftwood, dune plants and piles of kelp to hide from predators (Page and Stenzel 1981, p. 7). Plovers readily scrape blown sand out of their nests, but there is little they can do to protect their nests against serious storms or flooding other than to attempt to lay a new clutch if the old one is lost (Page *et al.* 1995, p. 8). No studies have quantified the amount of vegetation cover that would make an area unsuitable for nesting or foraging, but coastal nesting and foraging locations typically have relatively well-defined boundaries between open sandy substrate favorable to Pacific Coast WSPs and unfavorably dense vegetation inland. Such bounds show up well in aerial and satellite photographs, which we used to map essential habitat features. Therefore, based on the information above, we have identified areas with sandy or pebbly backgrounds or other substrate which provide camouflage for eggs, young, and nesting adults and areas that contain driftwood, dune plants, piles of kelp or other materials which provide cover and shelter to be physical or biological features needed by this species.

Sites for Breeding, Reproduction, and Rearing (or Development) of Offspring

Pacific Coast WSPs nest in depressions in open, relatively flat areas, near to tidal waters but far enough away to avoid being inundated by daily tides. Typical substrate is sandy or pebbly beaches, but plovers may also lay their eggs in existing depressions on harder ground such as salt pan, cobblestones, or dredge tailings. As stated earlier, Pacific Coast WSPs and their eggs are well camouflaged against light-colored, sandy or pebbly backgrounds (Page *et al.* 1995, p. 12), Where available, dune systems with numerous flat areas and easy access to the shore are particularly favored for nesting. Plover nesting areas must provide shelter from predators and human disturbance, as discussed above. Unfledged chicks forage with one or both parents, using the same foraging areas and behaviors as adults.

Undisturbed Areas

Disturbance of nesting or brooding plovers by humans and domestic animals can be a major factor affecting nesting success. Pacific Coast WSPs leave their nests when humans or pets approach too closely. Dogs may also deliberately chase plovers and inadvertently trample nests, while vehicles may directly crush adults, chicks, or nests, separate chicks from brooding adults, and interfere with foraging and mating activities (Warriner *et al.* 1986, p. 25; Service 1993, p. 12871; Ruhlen *et al.* 2003, p. 303). Repeated flushing of incubating plovers exposes the eggs to the weather and depletes energy reserves needed by the adult, which may result in reductions to nesting success. Surveys at Vandenberg Air Force Base, California, from 1994 to 1997, found the rate of nest loss on southern beaches at the Base to be consistently higher than on northern

beaches, where recreational use was much lower (Persons and Applegate 1997, p. 8). Ruhlen *et al.* (2003, p. 303) found that increased human activities on Point Reyes beaches resulted in a lower chick survival rate.

Pacific Coast WSP require relatively undisturbed areas. However, disturbance appears to be a relative feature that varies between sites and Pacific Coast WSPs seem to respond differently to disturbance by site. Consequently, one level of disturbance at a particular site may not be detrimental at another site. “Relatively undisturbed” is therefore a site-specific consideration. For example, incubating Pacific Coast WSPs at Vandenberg Air Force Base are easily disturbed because there is little human-related activity and noise due to the military mission of the Air Force. At Oceano Dunes SVRA about 30 miles to the south, Pacific Coast WSPs appear to tolerate more noise and activity. With intensive management, the reproductive success for Pacific Coast WSPs at Oceano Dunes SVRA is fairly high, although it varies from year to year.

Recent efforts in various areas along the Pacific coast that have been implemented to isolate nesting plovers from recreational beach users through the use of docents, symbolic fencing, and public outreach have correlated with higher nesting success in those areas (Page, *et al.* 2003, p. 3). Therefore we have identified undisturbed areas that allow the species to conduct their “normal activities” to be a physical or biological feature essential for the species.

Primary Constituent Elements for the Pacific Coast Western Snowy Plover

Pursuant to the Act and its implementing regulations under 50 CFR 424.12, we are required to identify the physical or biological features essential to the conservation of the Pacific Coast WSP in areas occupied at the time of listing, focusing on the features' primary constituent elements. We consider primary constituent elements to be the elements of physical or biological features that provide for a species' life-history processes and are essential to the conservation of the species. We are designating critical habitat in areas within the geographical areas that were occupied by the species at the time of listing that continue to be occupied today, that contain the primary constituent elements in the quantity and spatial arrangement to support life-history functions essential for the conservation of the species, and that may require special management considerations or protection. We are also designating areas outside the geographical area occupied by the species at the time of listing, but are essential for the conservation of the species. These sites are within the historical range of the Pacific Coast WSP, and were used by the species prior to listing. See *Criteria Used To Identify Critical Habitat* section below for a discussion of the species' historical and current geographic range.

We believe conservation of the Pacific Coast WSP is dependent upon multiple factors, including the conservation and management of areas to maintain "normal" ecological functions, where existing populations survive and reproduce. We are designating areas of critical habitat that provide some or all of the elements of physical or biological features essential for the conservation of this species. Based on the best available information, the primary constituent elements (PCEs) essential to the

conservation of the Pacific Coast WSP are the following:

Sandy beaches, dune systems immediately inland of an active beach face, salt flats, mud flats, seasonally exposed gravel bars, artificial salt ponds and adjoining levees, and dredge spoil sites, with:

- (1) Areas that are below heavily vegetated areas or developed areas and above the daily high tides;
- (2) Shoreline habitat areas for feeding, with no or very sparse vegetation, that are between the annual low tide or low-water flow and annual high tide or high-water flow, subject to inundation but not constantly under water, that support small invertebrates, such as crabs, worms, flies, beetles, spiders, sand hoppers, clams, and ostracods, that are essential food sources;
- (3) Surf- or water-deposited organic debris, such as seaweed (including kelp and eelgrass) or driftwood located on open substrates that supports and attracts small invertebrates described in PCE 2 for food, and provides cover or shelter from predators and weather, and assists in avoidance of detection (crypsis) for nests, chicks, and incubating adults; and
- (4) Minimal disturbance from the presence of humans, pets, vehicles, or human-attracted predators, which provide relatively undisturbed areas for individual and population growth and for normal behavior.

The critical habitat identified in this revised rule contains the primary constituent elements in the appropriate quantity and spatial arrangement essential to the conservation

of the Pacific Coast WSP, and supports multiple life processes for the species. Portions of some critical habitat units may be currently degraded; however, these areas could be restored with special management, thereby providing suitable habitat to offset habitat loss from anticipated sea-level rise resulting from climate change. Additional areas are proposed as critical habitat to allow a recovering Pacific Coast WSP population to occupy its former range, and allow adjustment to changing conditions (*e.g.* shifting sand dunes), expected sea-level rise, and human encroachment.

Special Management Considerations or Protection

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features that are essential to the conservation of the species and which may require special management considerations or protection.

All areas included in our revision of critical habitat will require some level of management to address the current and future threats to the physical and biological features essential to the conservation of the Pacific Coast WSP. Special management considerations or protection may be required to minimize habitat destruction, degradation, and fragmentation associated with the following threats, among others: water diversions, stabilized dunes and watercourses associated with urban development, human recreational activities, off-highway vehicle (OHV) use, beach raking, pets, nonnative vegetation, resource extraction, and fishing.

Water diversions reduce the transport of sediments, which contribute to suitable nesting and foraging substrates. Stabilized dunes and watercourses associated with urban development alter the dynamic processes of beach and river systems, thereby reducing the open nature of suitable habitat needed for predator detection. Human recreational activities disturb foraging or nesting activities or may attract and provide cover for approaching predators. The use of OHVs has been documented to crush plover nests and strike plover adults. Beach raking or grooming can remove wrack, reducing food resources and cover, and contributing to beach erosion. Pets (leashed and unleashed) can cause incubating adults to leave the nest and establish trails in the sand that can lead predators to the nest. Nonnative vegetation reduces visibility that plovers need to detect predators, and occupies otherwise suitable habitat. Resource extraction can disturb incubating, brooding, or foraging plovers. Fishing can disturb Pacific Coast WSPs and can attract predators by the presence of fish offal and bait (Lafferty 2001, p. 2222; Dugan 2003, p. 134; Schlacher *et al.* 2007, p. 557; Service 2007, p. 33; Dugan and Hubbard 2010, p. 67).

For discussion of the threats to the Pacific Coast WSP and its habitat, please see the 12-month finding on the petition to delist the Pacific Coast WPS (71 FR 20607, April 21, 2006), the final listing rule (58 FR 12864, March 5, 1993) and the final critical habitat rule (70 FR 56970, September 29, 2005). Please also see the **Revised Final Critical Habitat Designation** section below for a discussion of the threats in each of the proposed revised critical habitat units.

Criteria Used To Identify Critical Habitat

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. We review available information pertaining to the habitat requirements of the species. In accordance with the Act and its implementing regulation at 50 CFR 424.12(e), we consider whether designating additional areas—outside those currently occupied as well as those occupied at the time of listing—are necessary to ensure the conservation of the species. We are designating critical habitat in areas within the geographical area occupied by the species at the time of listing in 1993. We also are designating specific areas outside the geographical area occupied by the species at the time of listing because such areas are essential for the conservation of the species, and are within the Pacific Coast WSP’s historical range. We have determined that limiting the designation of critical habitat to those areas that were considered occupied at the time of listing is no longer sufficient to conserve the species because:

(1) There has been considerable loss and degradation of habitat throughout the species’ range since the time of listing;

(2) We anticipate a further loss of habitat in the future due to sea-level rise resulting from climate change; and;

(3) The species needs habitat areas that are arranged spatially in a way that will maintain connectivity and allow dispersal within and between units.

All areas designated as critical habitat are within the historical range of the species, which differs from the species' geographic distribution (i.e., occupancy) at the time of listing. We have identified areas to include in this designation by applying Criteria 1 through 6 below. In an effort to update our 2005 final designation of critical habitat for the Pacific Coast WSP, we used the best available information on occupancy and habitat conditions of areas that were analyzed in 2005 to determine whether to add or remove areas from this revision of critical habitat.

The amount and distribution of critical habitat being designated will allow populations of Pacific Coast WSP to:

- (1) Maintain their existing distribution;
- (2) Increase their distribution into previously occupied areas (needed to offset habitat loss and fragmentation);
- (3) Move between areas depending on resource and habitat availability (response to changing nature of coastal beach habitat) and support genetic interchange;
- (4) Increase the size of each population to a level where the threats of genetic, demographic, and normal environmental uncertainties are diminished; and
- (5) Maintain their ability to withstand local or unit level environmental fluctuations or catastrophes.

We considered the following criteria to select appropriate units for this revised rule:

(1) Areas throughout the range of the Pacific Coast WSP located to allow the species to move and expand. The dynamic nature of beach, dune, and similar habitats necessitates that Pacific Coast WSPs move to adjust for changes in habitat availability, food sources, and pressures on survivorship or reproductive success (Colwell *et al.* 2009, p. 5). Designating units in appropriate areas throughout the range of the Pacific Coast WSP allows for seasonal migration, year-to-year movements, and expansion of the Pacific Coast WSP to its historical boundaries. We consider this necessary to conserve the species because it assists in counterbalancing catastrophes, such as extreme climatic events, oil spills, or disease that might depress regional survival or productivity. Having units across the species' range helps maintain a robust, well-distributed population and enhances survival and productivity of the Pacific Coast WSP as a whole, facilitates interchange of genetic material between units, and promotes recolonization of any sites that experience declines or local extirpations due to low productivity or temporary habitat loss. Within this designation we focused on areas within the six recovery units identified in the Recovery Plan (Service 2007, Appendix A).

(2) Breeding areas. Areas identified in the Recovery Plan (Service 2007) known to support breeding Pacific Coast WSP were selected. Selected sites include historical breeding areas and areas currently being used by breeding plovers. These areas are essential to the conservation of the species because they contain the physical and biological features necessary for Pacific Coast WSPs to breed and produce offspring and ensure that population increases are distributed throughout the Pacific Coast WSP's range. By selecting breeding areas across the Pacific Coast WSP's range we can assist in

conserving the species' genetic and demographic robustness and important life-history stages for long-term sustainability of the entire listed species. Some breeding areas are occupied year-round and also are used as wintering areas by a portion of the population.

(3) Wintering areas. Major wintering sites not already selected under criterion 2 above were added. A “major” wintering site is defined as one that supports more wintering birds than average for the geographical region based on current or historical numbers. These areas are necessary to provide sufficient habitat for the survival of Pacific Coast WSPs during the nonbreeding season as these areas allow for dispersal of adults or juveniles to nonbreeding sites and provide roosting and foraging opportunities and shelter during inclement weather.

(4) Unique habitat. Additional sites were added that provide unique habitat, or that are situated to facilitate interchange between otherwise widely separated units. This criterion is based on standard conservation biology principles. By protecting a variety of habitats and facilitating interchange between them, we increase the ability of the species to adjust to various limiting factors that affect the population, such as predators, disease, major storms, habitat loss and degradation, and rise in sea level.

(5) Areas to maintain connectivity of habitat. Some areas that may be seasonally lacking in certain elements of essential physical or biological features and that contain marginal habitat were included if they were contiguous with areas containing one or more of those elements and if they contribute to the hydrologic and geologic processes

essential to the ecological function of the system. These areas are essential to the conservation of the species because they maintain connectivity within populations, allow for species movement throughout the course of a given year, and allow for population expansion.

(6) Restoration areas. We have selected some areas within occupied units that, once restored, would be able to support the Pacific Coast WSP. These areas generally are upland habitats adjacent to beach and other areas used by the species containing introduced vegetation, such as European beach grass (*Ammophila arenaria*), that currently limits use of the area by the species. These areas would provide habitat to offset the anticipated loss and degradation of habitat due to sea-level rise expected from the effects of climate change or due to development. These areas previously contained and would still contain the features essential to the conservation of the species once removal of the beachgrass and restoration of the area has occurred.

Methods Used to Designate Critical Habitat

In order to translate the criteria above to the areas on the ground we used the following methodology to identify the boundaries of critical habitat for the Pacific Coast WSP:

(1) We digitally mapped occurrence data within the range of the Pacific Coast WSP at the time and subsequent to the time of listing in the form of polygons and points

using ArcMap 9.3.1 (ESRI 2009). An attempt was made to consider site-specific survey data that was both current and historical. Survey information used in this designation was compiled from several sources during various timeframes as identified in the Recovery Plan (Service 2007, Appendix B).

(2) We utilized National Agriculture Imagery Program (NAIP 2009) aerial imagery with a 3.3-ft (1-m) resolution to determine the lateral extent (width) between the water and upland areas of habitat. The western (seaward) boundary of the coastal units is the water's edge based on NAIP imagery. This boundary varies daily with each changing tide, and will vary seasonally with storm surges, and sand erosion and deposition. Given the dynamic nature of coastal beaches, riparian areas, and salt pond management, we also delineated the lateral extent to encompass the entire area up to the lower edge of permanent upland vegetation or to the edge of a permanent barrier, such as a bluff, levee, sea wall, human development, etc. Using aerial imagery (NAIP 2009), we also delineated the northern and southern extents of the units to include the beach areas associated with the occurrence information identified above.

When determining revised critical habitat boundaries, we made every effort to avoid including developed areas, such as lands covered by buildings, sea walls, pavement, and other structures, because these areas lack physical or biological features for the Pacific Coast WSP. The scale of maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries

shown on the maps of this revised critical habitat are considered excluded in this revised rule. Therefore, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat unless the specific action would affect the physical and biological features in adjacent critical habitat.

We are designating critical habitat units that we have determined were occupied at the time of listing and contain sufficient elements of physical and biological features to support life-history processes essential for the conservation of the species, and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of the Pacific Coast WSP.

Units in this revised designation have sufficient elements of physical or biological features to support Pacific Coast WSP life-history processes. Some units contain all of the identified elements of physical and biological features and support multiple life-history processes. Some units contain only some elements of the physical and biological features necessary to support the Pacific Coast WSP particular use of that habitat.

(3) In determining the boundaries of the OPRD HCP-covered lands that are being excluded under section 4(b)(2) of the Act from this revised final critical habitat designation, we relied on Oregon State statute for the definition of beach and shoreline boundaries. HCP-covered lands consist of the "Ocean Shore," an area defined by Oregon State statute as the sandy areas of the Oregon coast between the extreme low tide and the actual or statutory vegetation line, whichever is farther landward. HCP-covered lands do

not include the Federal lands within the "Ocean Shore" boundary. For these Federal lands that are not excluded from this designation, the designated lands extend landward from the mean high tide. OPRD either owns and leases lands on the "Ocean Shore" as a State Park or State Natural Area or manages the "Ocean Shore" under a statutory recreation easement (Oregon Revised Statute (ORS) 390.635 and 390.620; Oregon Administrative Rule 736-020-0040(3)).

GIS data layers for the statute vegetation line and mean high water line were provided to the Service by the State of Oregon. The statutory vegetation line (ORS 390.770) was established in 1969. This is a jurisdictional line that determines the regulatory authority of OPRD to regulate development and recreation on the beach. The statutory vegetation line applies to all the land located along the Pacific Ocean between the Columbia River and the Oregon-California boundary between extreme low tide and the lines of vegetation as established and described according to the Oregon Coordinate System (ORS) 93.330.

Adjacent to Federal lands, the "Ocean Shore" only extends to the mean high water line (MHWL). MHWL is a tidal datum, which is the computed average of all the high water heights observed over the National Tidal Datum Epoch. For purposes of OPRD jurisdiction where adjacent to Federal lands, "mean high water" corresponds generally with the "line of ordinary high water" as defined in ORS 274.005(3). For mapping critical habitat in Oregon, MHWL data from south of Florence were collected in the summer of 2008; data from north of Florence were collected in the summer of 2009.

Using the 2009 National Agriculture Imagery Program data (NAIP) for proposed revised western snowy plover critical habitat, we incorporated the MHWL into the critical habitat layer to create separate polygons. These polygons represent HCP-covered lands adjacent to Federal lands and were excluded from critical habitat.

Where the "Ocean Shore" overlaps non-Federal lands, we incorporated the statutory vegetation line into the critical habitat layer to determine HCP-covered lands. Based on aerial imagery, if the actual vegetation line was farther landward of the statutory vegetation line, all land seaward of the actual vegetation line was excluded from critical habitat, as defined by Oregon statute. All areas that were not identified for exclusion remain as designated critical habitat.

Revised Final Critical Habitat Designation

We are designating approximately 6,077 ac (2,460 ha) in 4 units within Washington, approximately 2,112 ac (855 ha) in 9 units within Oregon, and 16,337 ac (6,612 ha) in 47 units within California. The area identified as critical habitat Units CA32, Vandenberg Air Force Base North and CA33, Vandenberg Air Force Base South (combined total of approximately 1,134 ac (459 ha)), have been exempted from this revised final designation in their entirety under section 4(a)(3)(B) of the Act (refer to the **Exemptions** section below). These units had been previously proposed for designation as they did not have clear management protections for Pacific Coast WSP until the April 14, 2011, approval of the base's INRMP. Additional areas have been excluded under

section 4(b)(2) of the Act (see **Exclusions** section below). Table 3 identifies the areas known to be occupied at the time of listing as well as current occupancy status.

Table 3. Occupancy of Pacific Coast WSP by designated critical habitat units.

Unit	Occupied at Time of Listing?	Currently Occupied?
WA 1 Copalis Spit	No	No
WA 2 Damon Point	Yes	Yes
WA 3A Midway Beach	Yes	Yes
WA 3B Shoalwater/Graveyard Spit	Yes	Yes
WA 4A Leadbetter Spit	Yes	Yes
WA 4B Gunpowder Sands Island	Unknown	No
OR 2 Necanicum River Spit	No	No
OR 4 Bayocean Spit	Yes	No
OR 6 Sand Lake South	No	No
OR 7 Sutton/Baker Beaches	Yes	Yes
OR 8A Siltcoos Breach	Yes	Yes
OR 8B Siltcoos River Spit	Yes	Yes
OR 8C Dunes Overlook/Tahkenitch Creek Spit	Yes	Yes
OR 8D North Umpqua River Spit	No	No
OR 9 Tenmile Creek Spit	Yes	Yes
OR 10 Coos Bay North Spit	Yes	Yes
OR 11 Bandon to New River	Yes	Yes
OR 13 Euchre Creek Spit	No	No
CA 1 Lake Earl	Yes	Yes
CA 2 Gold Bluffs Beach	Yes	Yes
CA 3A Stone Lagoon	Yes	Yes
CA 3B Big Lagoon	Yes	Yes

Unit	Occupied at Time of Listing?	Currently Occupied?
CA 4A Clam Beach/Little River	Yes	Yes
CA 4B Mad River Beach	Yes	Yes
CA 5A Humboldt Bay South Spit Beach	Yes	Yes
CA 5B Eel River North Spit and Beach	Yes	Yes
CA 5C Eel River South Spit and Beach	Yes	Yes
CA 6 Eel River Gravel Bars	Yes	Yes
CA 7 MacKerricher Beach	Yes	Yes
CA 8 Manchester Beach	No	Yes
CA 9 Dillon Beach	Yes	Yes
CA 10A Point Reyes	Yes	Yes
CA 10B Limantour	Yes	Yes
CA 11 Napa-Sonoma Marshes	Yes	Yes
CA 12 Hayward	Yes	Yes
CA 13A Eden Landing	Yes	Yes
CA 13B Eden Landing	Yes	Yes
CA 13C Eden Landing	Yes	Yes
CA 14 Ravenswood	Yes	Yes
CA 15 Warm Springs	Yes	Yes
CA 16 Half Moon Bay	Yes	Yes
CA 17 Waddell Creek Beach	Yes	Yes
CA 18 Scott Creek Beach	Yes	Yes
CA 19 Wilder Creek Beach	Yes	Yes
CA 20 Jetty Road to Aptos	Yes	Yes
CA 21 Elkhorn Slough Mudflats	Yes	Yes
CA 22 Monterey to Moss Landing	Yes	Yes
CA 23 Point Sur Beach	Yes	Yes

Unit	Occupied at Time of Listing?	Currently Occupied?
CA 24 San Carpoforo Creek	Yes	Yes
CA 25 Arroyo Laguna Creek	Yes	Yes
CA 26 San Simeon State Beach	Yes	Yes
CA 27 Villa Creek Beach	Yes	Yes
CA 28 Toro Creek	Yes	Yes
CA 29 Atascadero Beach/Morro Stand State Beach	Yes	Yes
CA 30 Morro Bay Beach	Yes	Yes
CA 31 Pismo Beach/Nipomo Dunes	Yes	Yes
CA 34 Devereaux Beach	Yes	Yes
CA 35 Santa Barbara Beaches	Yes	Yes
CA 36 Santa Rosa Island Beaches	Yes	Yes
CA 37 San Buenaventura Beach	Yes	Yes
CA 38 Mandalay Beach to Santa Clara River	Yes	Yes
CA 39 Ormond Beach	Yes	Yes
CA 43 Zuma Beach	Yes	Yes
CA 44 Malibu Beach	Yes	Yes
CA 45A Santa Monica Beach	Yes	Yes
CA 45B Dockweiler North	Yes	Yes
CA 45C Dockweiler South	Yes	Yes
CA 45D Hermosa State Beach	Yes	Yes
CA 46A Bolsa Chica State Beach	Yes	Yes
CA 46B Bolsa Chica Reserve	Yes	Yes
CA 46C Bolsa Chica Reserve	Yes	Yes
CA 46D Bolsa Chica Reserve	Yes	Yes
CA 46E Bolsa Chica Reserve	Yes	Yes
CA 46F Bolsa Chica Reserve	Yes	Yes

Unit	Occupied at Time of Listing?	Currently Occupied?
CA 47 Santa Ana River Mouth	No	No
CA 48 Balboa Beach	Yes	Yes
CA 50(A–C) Batiquitos Lagoon	Yes	Yes
CA 51(A–C) San Elijo Lagoon Ecological Reserve	Yes	Yes
CA 52(A–C) San Dieguito Lagoon	Yes	Yes
CA 53 Los Penasquitos Lagoon	Yes	Yes
CA 54A Fiesta Island	Yes	No
CA 54B Mariner’s Point	Yes	Yes
CA 54C South Mission Beach	Yes	Yes
CA 54D San Diego River Channel	Yes	Yes
CA 55B Coronado Beach	Yes	Yes
CA 55C Silver Strand Beach	Yes	Yes
CA 55D Delta Beach	Yes	Yes
CA 55E Sweetwater Marsh National Wildlife Refuge and D Street Fill	Yes	Yes
CA 55F Silver Strand State Beach	Yes	Yes
CA 55H Naval Radio Receiving Facility	Yes	Yes
CA 55I San Diego National Wildlife Refuge, South Bay Unit	Yes	Yes
CA 55J Tijuana Estuary and Border Field State Park	Yes	Yes

Table 4 outlines the areas included in this revised final critical habitat designation by land ownership. Units designated as critical habitat are discussed in detail below. The areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Pacific Coast WSP.

Table 4. Critical habitat units for the Pacific Coast WSP by land ownership.

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
WA 1 Copalis Spit	407	165	State	407	165
WA 2 Damon Point	673	272	State	648	262
			Other	25	10
WA 3A Midway Beach	697	282	State	697	282
WA 3B Shoalwater/Graveyard Spit **	1,121	454	State	505	204
			Other	192	78
WA 4A Leadbetter Spit	2,700	1,093	Federal	997	403
			State	1,703	689
WA 4B Gunpowder Sands Island	904	366	Federal	904	366
WASHINGTON STATE TOTALS			Federal	1,901	769
			State	3,960	1,602
			Other	217	88

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
OR 2 Necanicum River Spit	211	85	Other	11	4
OR 4 Bayocean Spit	367	149	Federal	199	81
			Other	2	1
OR 6 Sand Lake South	200	81	Other	5	2
OR 7 Sutton/Baker Beaches	372	151	Federal	276	112
OR 8A Siltcoos Breach	15	6	Federal	7	3
			State	8	3
OR 8B Siltcoos River Spit	241	97	Federal	116	47
OR 8C Dunes Overlook/ Tahkenitch Creek Spit	716	290	Federal	383	155
OR 8D North Umpqua River Spit	236	96	Federal	59	24
OR 9 Tenmile Creek Spit	244	99	Federal	223	90
OR 10 Coos Bay North Spit	308	125	Federal	273	110
OR 11 Bandon to New River	1,016	411	Federal	459	186
			Other	82	33
OR 13 Euchre Creek Spit	116	47	Other	9	4
OREGON STATE TOTALS			Federal	1,995	807
			State	8	3
			Other	109	44

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
CA 1 Lake Earl	74	30	State	73	30
CA 2 Gold Bluffs Beach*	144	58	State	233	94
CA 3A Stone Lagoon*	52	21	State	55	22
CA 3B Big Lagoon*	212	86	State	268	108
CA 4A Clam Beach/Little River*	194	79	State	222	90
			Other	115	47
CA 4B Mad River Beach	456	185	State	148	60
			Other	304	123
CA 5A Humboldt Bay South Spit*	419	170	Federal	20	8
			State	542	219
			Other	10	4
CA 5B Eel River North Spit and Beach*	259	105	State	457	185
			Other	7	3
CA 5C Eel River South Spit and Beach	339	137	State	172	70
			Other	164	66
CA 6 Eel River Gravel Bars*	1,139	461	State	304	123
			Other	1,045	463
CA 7 MacKerricher Beach*	1,176	476	State	1,144	463
			Other	74	30
CA 8 Manchester Beach*	482	195	Federal	68	28
			State	425	172
			Other	12	5
CA 9 Dillon Beach	39	16	Other	39	16
CA 10A Point Reyes	460	186	Federal	460	186
CA 10B Limantour	156	63	Federal	156	63
CA 11 Napa -Sonoma	618	250	State	618	250
CA 12 Hayward	1	0	Other	1	0
CA 13A Eden Landing	237	96	State	228	92
			Other	8	3
CA 13B Eden Landing	171	69	State	171	69
CA 13C Eden Landing	609	246	State	602	244
			Other	7	3
CA 14 Ravenswood	89	36	Other	89	36
CA 15 Warm Springs	168	68	Federal	168	68
CA 16 Half Moon Bay	36	15	State	36	15
CA 17 Waddell Creek Beach	25	10	State	19	8
			Other	6	2
CA 18 Scott Creek Beach	23	9	State	15	6

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
			Other	8	3
CA 19 Wilder Creek Beach	15	6	State	14	6
			Other	1	0
CA 20 Jetty Road Aptos	399	161	State	369	149
			Other	30	12
CA 21 Elkhorn Slough Mudflats	281	114	State	281	114
CA 22 Monterey to Moss Landing	967	391	Federal	415	168
			State	285	115
			Other	259	105
CA 23 Point Sur Beach	72	29	State	38	15
			Other	34	14
CA 24 San Carpoforo Creek	24	10	Federal	4	2
			State	18	7
			Other	2	1
CA 25 Arroyo Laguna Creek	28	11	State	18	7
			Other	10	4
CA 26 San Simeon State Beach	24	10	State	24	10
CA 27 Villa Creek Beach	20	8	State	20	8
CA 28 Toro Creek	34	14	State	11	4
			Other	23	9
CA 29 Atascadero Beach/Morro Strand State Beach	213	86	State	64	26
			Other	149	60
CA 30 Morro Bay Beach	1,076	435	State	948	383
			Other	129	52
CA 31 Pismo Beach/Nipomo Dunes	1,652	669	Federal	242	98
			State	552	223
			Other	858	347
CA 34 Devereaux Beach	52	21	State	43	17
			Other	9	4
CA 35 Santa Barbara Beaches	65	26	State	30	12
			Other	35	14
CA 36 Santa Rosa Island Beaches	586	237	Federal	586	237
CA 37 San Buenaventura Beach	70	28	State	70	28
CA 38 Mandalay Beach to Santa Clara River	672	272	State	459	186
			Other	213	86
CA 39 Ormond Beach	320	130	State	159	65
			Other	161	65
CA 43 Zuma Beach	73	30	State	1	0

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
			Other	72	29
CA 44 Malibu Beach	13	5	State	13	5
CA 45A Santa Monica Beach	48	19	State	29	12
			Other	19	8
CA 45B Dockweiler North	34	14	State	34	14
CA 45C Dockweiler South	65	26	State	54	22
			Other	11	5
CA 45D Hermosa State Beach	27	11	State	8	3
			Other	19	8
CA 46A Bolsa Chica Beach	93	38	State	93	38
CA 46B Bolsa Chica Reserve	2	1	State	2	1
CA 46C Bolsa Chica Reserve	222	90	State	222	90
CA 46D Bolsa Chica Reserve	2	1	State	2	1
CA 46E Bolsa Chica Reserve	247	100	State	247	100
CA 46F Bolsa Chica Reserve	2	1	State	2	1
CA 47 Santa Ana River Mouth	19	8	State	18	7
			Other	1	0
CA 48 Balboa Beach	25	10	Other	25	10
CA 51A-C San Elijo Lagoon Ecological Reserve	15	6	State	11	4
			Other	4	2
CA 52A San Dieguito Lagoon	4	2	Other	4	2
CA 55B Coronado Beach	74	30	State	74	30
CA 55E Sweetwater Marsh National Wildlife Refuge and D Street Fill	132	54	Federal	79	32
CA 55F Silver Strand State Beach	82	33	Federal	78	31
			State	4	1
CA 55I San Diego National Wildlife Refuge, South Bay Unit	5	2	Federal	5	2
CA 55J Tijuana Estuary and Border Field State Park	150	61	Federal	71	29
			Other	79	32
CALIFORNIA STATE TOTALS			Federal	2,352	952
			State	9,857	3,989
			Other	4,128	1,671
TOTALS DESIGNATED BY OWNERSHIP			Federal	6,248	2,529
			State	13,825	5,595
			Other	4,454	1,802
TOTALS DESIGNATED BY STATE			Washington	6,078	2,460

Critical Habitat Units	Proposed acres	Proposed hectares	Land Ownership	Designated acres	Designated hectares
			Oregon	2,112	855
			California	16,337	6,612
GRAND TOTAL				24,527	9,926

*Land ownership values differ from the revised proposed rule due to updated ownership data.

** Off-reservation lands (fee-owned) were not excluded and are included within the Other land ownership total.

Values in table may not sum due to rounding.

Brief descriptions of all units and reasons why they meet the definition of critical habitat for the Pacific Coast WSP are described below. The units are grouped by State and listed in order geographically north to south. For more information about the areas excluded from critical habitat designation, please see the **Exclusions** section of this revised final rule.

WASHINGTON

WA 1, Copalis Spit, 407 ac (165 ha):

Copalis Spit is located along the central Washington coast, approximately 20 mi (32 km) northwest of the Community of Hoquiam in Grays Harbor County. Copalis Spit is a 2-mi (3-km) long sand spit bounded by the Copalis River on the northern and landward sides. The Copalis Beach access road off State Route 109 and State Park property line demark the southern boundary. The unit is entirely within Griffiths-Priday Ocean State Park (Washington State Parks and Recreation Commission).

This unit is the northernmost unit in the range of the species and historically supported 6 to 12 nesting pairs of Pacific Coast WSPs, but no nesting has been documented since 1984 (Service 2007, p. 21). This unit was not occupied at the time of listing and is not currently occupied. The unit consists of a long sandy beach with sparsely vegetated dunes that extend to the river, providing nesting and foraging opportunities, as well as protection from the weather. The northward shift of Connor Creek washed out the beach access road at the southern end, effectively closing the area to motorized vehicles. Because of its relatively remote location, the area receives little human use and is therefore relatively undisturbed. Although currently unoccupied, the unit is considered essential for the conservation of the species as it allows for population expansion into the northern extent of the Pacific Coast WSP's historical range from adjacent occupied areas and has high-quality habitat, including a long sandy beach with limited disturbance with sparsely vegetated dunes that extend to the river, providing nesting and foraging opportunities for the species.

WA 2, Damon Point, 673 ac (272 ha):

This unit is located at the southern end of the City of Ocean Shores in Grays Harbor County and is a sandy spit that extends into Grays Harbor. The unit boundary begins at the Damon Point parking area off Marine View Drive. The western boundary generally follows the property line for the Oyhut Wildlife Area.

This unit was occupied at the time of listing, and we consider this unit to be

currently occupied. Research in the mid-1980s indicated that up to 20 Pacific Coast WSPs have used Damon Point for nesting. However, use has declined significantly at this site, with only six adult birds documented using the area during the breeding season in 2005. A historic shipwreck (*S.S. Catala*) was exposed during winter storms in 2006, and the vessel was removed from the spit due to oil spill and other hazardous materials concerns over a period of 17 months (State of Washington, Department of Ecology 2007). The opportunity to view the shipwreck and removal operation drew media attention, and hundreds of visitors visited the site on weekends. Visitation of the area has dropped off since the clean-up. Even though no plover nesting has been documented at Damon Point since 2006, we still consider this unit occupied by the species based on previous use of the area, on the fluctuating use of areas in general by the species as a response to habitat and resource availability, and because breeding surveys are not extensive presence-absence surveys and only provide information during the breeding season. We have determined that the unit contains the physical and biological features essential to the conservation of the species which may require special management considerations or protection. The unit includes sandy beaches that are relatively undisturbed by human or tidal activity (nesting habitat), large expanses of sparsely vegetated barren terrain, and mudflats and sheltered bays that provide ample foraging areas.

The majority (648 ac (262 ha)) of the unit is administered by the State of Washington (Department of Fish and Wildlife and Department of Natural Resources). There are over 7 mi (11 km) of sandy beaches and shoreline at Damon Point, and the

shape of the spit changes constantly with winter storms and nearshore sand drift. In recent years, some of the lower elevation areas have been overwashed, and coastal erosion may result in separation of the spit from the mainland in the near future. The western edge of the unit lies adjacent to a municipal wastewater treatment facility that is managed by the City of Ocean Shores, with a few undevelopable private parcels in the tidelands near the parking area. Similar to Copalis Spit, the access road has washed out, and the area is currently inaccessible to motorized vehicles.

The primary threats to Pacific Coast WSPs that may require special management at this time are recreational use, including pedestrians and unleashed pets; habitat loss from European beach grass; and potential reopening of the vehicle access road. Special management in the form of developing and enforcing regulations to address the recreation issues may be needed. Management to remove and control beach grass will prevent further spread of nonnative vegetation, thereby maintaining and expanding the elements of essential physical or biological features identified above.

WA 3A, Midway Beach, 697 ac (282 ha):

Located adjacent to the Community of Grayland, this subunit extends from the northern boundary of Grayland Beach State Park, through South Beach State Park to Cape Shoalwater at the southern end in Pacific County. Midway Beach is an expansive beach and is nearly 0.5 mi (0.8 km) wide at the widest point. This subunit was occupied at the time of listing and is currently occupied. This subunit includes the following

physical and biological features essential to the conservation of the species: large areas of sand dune habitat that is relatively undisturbed, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and close proximity to tidally influenced estuarine mud flats that provide cover or shelter from predators, and are important for foraging.

Beach accretion since 1998 has greatly improved habitat conditions, resulting in this beach becoming a primary nesting area in the State. From 1998 to 2005, an average of 18 plovers nested annually at Midway Beach, and from 2003 to 2006, between 23 and 28 Pacific Coast WSPs nested at Midway Beach.

Primary threats at this subunit that may require special management include motorized vehicle use on the beaches and human activity. The recent closure of the Midway Beach Access Road due to safety concerns, *e.g.*, vehicles getting stuck in deep sand, has reduced impacts in the nesting area, but may not be permanent. Therefore, the physical or biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats associated with human-related recreation and other activities. Developing and enforcing regulations to address the recreation issues may be needed. Management to remove and control beach grass will prevent further spread of nonnative vegetation, thereby maintaining and expanding the elements of essential physical and biological features identified above.

WA 3B, Shoalwater/Graveyard Spit, 696 ac (282 ha):

The subunit is located in Pacific County at Shoalwater Bay (also known as Graveyard Spit). This beach is an extension of Midway Beach, and extends south into the entrance of Willapa Bay. The western portion of this subunit starts at a narrow strip of beach adjacent to State Route 105 and extends to the western edge of the Shoalwater Bay Indian reservation. This portion of the subunit is approximately 148 ac (60 ha) in size. The eastern portion of the subunit starts at the eastern edge of the Shoalwater Bay Indian reservation boundary and continues in a southwesterly direction to the Community of Tokeland. This portion of the subunit is approximately 548 ac (222 ha) in size. The landward extent of the unit is the edge of the bay, and the seaward extent of the unit is the Pacific Ocean's water's edge. In our March 2011 revised proposal, we proposed 1,121 ac (454 ha) for this subunit; approximately 425 ac (172 ha) of the proposed subunit that is part of the Shoalwater Bay Tribal lands have been excluded from designation under section 4(b)(2) of the Act (refer to the **Exclusions** section below).

This subunit was occupied at the time of listing and is currently occupied. The State Recovery Plan for the western snowy plover (WDFW 1995) defines the geographic area from Grayland Beach State Park south to Toke Point as "South Beach." Based on documented sightings and records of western snowy plover use for the south beach geographic area (WDFW 1995, Appendix C), Shoalwater /Graveyard Spit was occupied at the time of listing and is a known or presumed historical nesting area (WDFW 1995, Figure 2, p. 3). Pacific Coast WSPs nested on the Shoalwater Bay Indian reservation in 2006, 2007 and 2008, but no nesting has been documented on the spit since 2008.

Although fledging success is relatively high at this location, plover use of the Shoalwater/Graveyard Spit area is sporadic.

The subunit includes the following features essential to the conservation of the species: large areas of sand dune habitat that are relatively undisturbed; areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates; and close proximity to tidally influenced estuarine mud flats. Special management that may be required includes management of human-related activities to reduce disturbance to breeding Pacific Coast WSPs, and maintenance of the physical or biological features within the subunit.

Based on interpretation of aerial imagery, the Cape Shoalwater area has experienced extensive erosion over the past 15 years. A nearly 0.3 mi-wide (0.5 km-wide) by 1.5 mi-long (2.4 km-long) section of the coastline, including roads and residences, has been reclaimed by the ocean, resulting in the accretion of Midway Beach. The accretion of beach improves elements of essential physical or biological features. Because the county ownership layer for this subunit is ambiguous and all private property parcels are under water, the layer could not be used for precise acreage calculations. However, the vast majority of the unit is managed by the State of Washington.

WA 4A, Leadbetter Spit, 2,700 ac (1,093 ha):

The Leadbetter Spit subunit is located in Pacific County at the northern tip of the

Long Beach Peninsula, and consists of a 26 mi-long (42 km-long) spit that defines the west side of Willapa Bay and extends down to the mouth of the Columbia River. The subunit is located just north of the community of Ocean Park and includes Leadbetter Point State Park (SP) and the Willapa NWR at the northern end of the spit. The main portion of this subunit is on the ocean side, and includes the coastal beaches from the tip of the peninsula, and the habitat restoration area down to Oysterville Road, approximately 1.8 mi (3 km) south of Leadbetter Point SP. The boundaries for this subunit have changed from that proposed in our March 2011 rule as a result of information provided to us by Willapa NWR staff and an acreage miscalculation in the March 2011 proposed rule (76 FR 16046) (refer to the **Summary of Changes from the Revised Proposed** section above).

This subunit contains some areas that are currently not suitable habitat (water and vegetated areas) but may become suitable with management actions, sea-level rise, and ongoing natural changes and beach accretion on the spit. Although the refuge manages areas above the high tide line on the northern portion of the spit, the ownership data do not reflect where the State and Federal jurisdictions lie. Thus, all ownership acreages are approximate for this unit. The subunit includes approximately 8 mi (13 km) of coastal beaches and sheltered bays. Approximately 987 ac (399 ha) are on lands that are managed by the Willapa NWR, and the remaining 1,713 ac (693 ha) are managed by the Washington State Park and Recreation Department and Department of Natural Resources.

Leadbetter Spit was occupied at the time of listing, is currently occupied, and is the largest subunit in Washington. Approximately 25 to 30 Pacific Coast WSPs nest and overwinter on the spit annually, with most of the nesting occurring in the snowy plover habitat restoration area within the Willapa NWR. Between 10 and more than 40 breeding adults were recorded between 2005 and 2009 (WDFW 2009, p. 12). A few pairs nest along the ocean beaches and on State Park lands just south of the Willapa NWR. The 2007 Recovery Plan lists a management goal of 30 breeding adults for this subunit (Service 2007, Appendix B).

The subunit includes the following features essential to the conservation of the species: Relatively undisturbed, sandy beaches above and below the high-tide line and sparsely vegetated dunes for nesting; miles of coastal wrack line supporting small invertebrates; and close proximity to tidally influenced estuarine mud flats and sheltered bays for foraging. The combined dynamics of weather and surf cause large quantities of wood and shell material to accumulate on the spit, providing prime nesting habitat, hiding areas from predators, foraging opportunities, and shelter from inclement weather.

European beach grass threatens the habitat quality of the subunit. Special management that may be needed includes restoration and maintenance of degraded habitat to ensure the reinfestation of nonnative vegetation does not occur. Doing so will ensure that elements of essential physical or biological features within this subunit remain intact. Primary threats that may require special management include the State's management of the spring razor clam season, which opens beaches to motorized vehicle

and provides access into Pacific Coast WSP nesting areas that normally receive limited human use. The State Parks and Recreation Commission has posted areas where plovers nest, increased enforcement of the wet sand driving regulations, and conducted habitat restoration on State Park lands.

WA 4B, Gunpowder Sands Island, 904 ac (366 ha):

The subunit includes Gunpowder Sands Island just off the northern tip of the Long Beach Peninsula. The island shifts location annually and only a portion of the mapped area may be dry sand at any given time. The island is managed by the State of Washington.

Because the island is only accessible by boat, breeding surveys for Pacific Coast WSP at this location are sporadic. It is unknown if this Gunpowder Sands Island was occupied at the time the Pacific Coast WSP was listed in 1993, but two successful nests and one failed nest were documented on the island in 1995 (WDFW heritage data). Although nesting has not been recently confirmed for this area, we consider this unit essential for the conservation of the species because it provides a safe nesting, resting, and foraging area free of human disturbance and connectivity between two currently occupied areas. We consider that it is important for the species' use, based on the proximity of the site to the occupied nesting area on Leadbetter Spit, and on fluctuating habitat and resource availability.

Gunpowder Sands Island also has physical or biological features essential to the

conservation of the species: Relatively undisturbed, sandy beaches above and below the high-tide line; sparsely vegetated dunes for nesting; and coastal wrackline supporting small invertebrates. The island is periodically overwashed during winter storms, resulting in dry sand and beach habitat with little or no vegetation.

OREGON

OR 1, Columbia River Spit:

Unit OR 1 has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

OR 2, Necanicum River Spit, 11 ac (4 ha):

We proposed 211 (85 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 200 ac (81 ha) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the western coast of Clatsop County, adjacent to the City of Gearhart, and less than 1 mi (2 km) north of the City of Seaside. It is bounded by the Necanicum River estuary on the south, City of Gearhart to the north and east, and Oregon Parks and Recreation Department's HCP-covered lands to the west. The mouth of the

river changes periodically. The northern inland portion of the unit is overgrown with European beach grass; sea-level rise and overwashing of this area during the winter months is anticipated to result in vegetation removal and the creation of additional Pacific Coast WSP breeding habitat. Eleven ac (4 ha) of privately owned land landward of HCP-covered lands are included in this revised designated critical habitat because they are essential to the conservation of the Pacific Coast WSP to address habitat needs arising from anticipated sea-level rise.

Necanicum River Spit was not considered occupied at the time the Pacific Coast WSP was listed in 1993. Two breeding Pacific Coast WSPs were documented in 2002 (Service unpublished data). We consider the unit is essential for the conservation of the species as it is needed for use in response to fluctuating habitat and resource availability. It has the capability of providing future connectivity between occupied areas, dispersal habitat between units, and habitat for resting and foraging. This unit may provide habitat to support breeding plovers and facilitate interchange between otherwise widely separated units within Recovery Unit 1 (identified in the Recovery Plan, Service 2007) in Oregon and Washington.

Necanicum River Spit is a characteristic dune-backed beach with wide sand spits in close proximity to tidally influenced estuarine mud flats. The unit contains sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; and close proximity to tidally influenced estuarine mud flats, which are considered essential for the conservation of the Pacific Coast WSP.

OR 3, Nehalem River Spit:

Unit OR 3 has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

OR 4, Bayocean Spit, 201 ac (82 ha):

We proposed 367 ac (149 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 80 ac (32 ha) were removed from proposed critical habitat at the shoreline due to inundation, and 86 ac (35 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the western coast of Tillamook County, and about 9 mi (15 km) northwest of the City of Tillamook. It is bounded by Tillamook Bay on the east, the Tillamook Bay South Jetty to the north, the northern boundary of Bayocean Peninsula County Park 2.0 mi (3.2 km) to the south, and HCP-covered lands to the west. The unit is located behind a relatively low foredune. Sea-level rise and overwashing of this area during the winter months is anticipated to result in vegetation removal and creation of additional Pacific Coast WSP breeding habitat. Two ac (1 ha) of privately owned land and 199 ac (81 ha) of federally owned land landward of the HCP-covered lands are designated due to anticipated sea-level rise.

Bayocean Spit was occupied at the time of listing. Two Pacific Coast WSPs were documented in 1993, and six plovers in 1995, in this unit during the breeding season (ODFW in litt. 1994, Appendix, Table 2; ODFW unpublished data). Prior to 2001, winter use of the area by plovers was documented consistently. Recent records indicate use by wintering plovers in 2007 and 2008 (Service unpublished data). We consider the unit to be needed by the species for future use in response to fluctuating habitat and resource availability. It has the capability of providing future connectivity between occupied areas, dispersal habitat between units, and habitat for resting and foraging. This unit may provide habitat to support breeding plovers and facilitate interchange between otherwise widely separated units within Recovery Unit 1 (identified in the Recovery Plan, Service 2007) in Oregon and Washington.

Bayocean Spit is a characteristic dune-backed beach in close proximity to tidally influenced estuarine mud flats. The unit contains the following features essential to the conservation of the species: sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; sandy beach above the mean high water line that supports small invertebrates; and close proximity to tidally influenced estuarine mud flats.

Primary threats to essential physical and biological features that may require special management in this unit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans and pets in important foraging and nesting areas; and predators.

OR 5, Netarts Spit:

Unit OR 5 has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

OR 6, Sand Lake South, 5 ac (2 ha):

We proposed 200 ac (81 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 195 ac (79 ha) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the southwestern coast of Tillamook County, about 4.5 mi (7 km) north of Pacific City. It is bounded by Sand Lake estuary to the north and east, the northern limit of development in the town of Tierra Del Mar to the south, and HCP-covered lands to the west. The mouth of the lake changes periodically. The unit is a small upland portion of the spit. Sea-level rise and overwashing of this area during the winter months is anticipated to result in vegetation removal and the creation of additional Pacific Coast WSP breeding habitat. Five ac (2 ha) of privately owned land landward of HCP-covered lands are included in this revised designated critical habitat because they are essential to the conservation of the Pacific Coast WSP to address habitat needs arising from anticipated sea-level rise.

Sand Lake South was not considered occupied at the time the Pacific Coast WSP was listed in 1993. However, four snowy plovers were observed during the breeding season at Sand Lake in 1986 (ODFW, in litt. 1994, Appendix, Table 2). Although nesting has not been recently confirmed for this area, Sand Lake South is an historical breeding site within the species' range. The unit has the capability of providing connectivity between occupied areas, dispersal habitat between units, and habitat for resting and foraging. This unit is needed to provide habitat to support breeding plovers and facilitate interchange between otherwise widely separated units within Recovery Unit 1 (identified in the Recovery Plan, Service 2007) in Oregon and Washington.

Sand Lake South is a characteristic dune-backed beach with wide sand spits in

close proximity to tidally influenced estuarine mud flats. The unit contains sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; and close proximity to tidally influenced estuarine mud flats, which are considered essential for the conservation of the Pacific Coast WSP.

OR 7, Sutton/Baker Beaches, 276 ac (112 ha):

We proposed 372 (151 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 96 ac (39 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the western coast of Lane County, about 5 mi (8 km) north of the City of Florence. It is located 2.25 mi south of Heceta Head and bounded by Sutton Creek to the south, lands administered by the Siuslaw National Forest to the east, and HCP-covered lands to the west. The unit consists of 276 ac (112 ha) of Federal lands, managed by the U.S. Forest Service's (USFS) Siuslaw National Forest.

This unit was occupied at the time of listing and is currently occupied. The most recently documented Pacific Coast WSPs for this unit includes four breeding plovers in 2007 (Lauten *et al.* 2007, p. 5). We have determined that the unit contains the physical and biological features essential to the conservation of the species which may require special management considerations or protection. This unit provides habitat to support

breeding plovers and facilitates interchange between otherwise widely separated units under intensive management. It extends behind a relatively low foredune in several places into areas overgrown with beach grass. Sea-level rise and overwashing of these areas during the winter months is anticipated to result in vegetation removal and the creation of additional plover breeding habitat.

The unit is characteristic of a dune-backed beach and wide sand spits with overwash areas and contains an interdune flat created through habitat restoration. It includes the following features essential to the conservation of the species: sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; and sandy beach above the mean high water line that supports small invertebrates.

Primary threats to essential physical and biological features that may require special management in this unit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans, pets, and horses in important foraging and nesting areas; and predators.

OR 8A, Siltcoos Breach, 15 ac (6 ha):

This subunit is on the southwestern coast of Lane County, about 7 mi (11 km) southwest of the City of Florence. It is an important wintering area that includes a large opening in the foredune 1.2 mi (2 km) north of the Siltcoos River. The southern

boundary is located 0.6 mi (1 km) north of the Siltcoos River, with the Oregon Dunes National Recreation Area (NRA) to the east and the Pacific Ocean to the west. The subunit consists of 7 federally owned ac (3 ha) managed by the USFS as the Oregon Dunes NRA in the Siuslaw National Forest and 8 ac (3 ha) on the "Ocean Shore," managed by OPRD.

This subunit was occupied at the time of listing and is currently occupied with recently documented wintering Pacific Coast WSPs in 2005, 2006, 2007, and 2010 (Service unpublished data). As many as 59 Pacific Coast WSP were documented during the winter of 2005 (C. Burns, pers. comm. 2006), and 26, 36, and 24 Pacific Coast WSP in 2006, 2007 and 2010, respectively (Service unpublished data).

The subunit is characteristic of a dune-backed beach. It includes the following features essential to the conservation of the species: sparsely vegetated, low-lying areas of sandy dune and sandy beach above the mean high water line that supports small invertebrates.

Primary threats to essential physical and biological features that may require special management in this subunit are degradation of the sand dune system due to encroachment of European beach grass on the available wintering habitat and disturbance from humans, pets, and vehicles in important roosting and foraging areas.

OR 8B, Siltcoos River Spit, 116 ac (47 ha):

We proposed 241 (97 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 125 ac (51 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This subunit is located in Lane and Douglas Counties, about 7 mi (11 km) southwest of the City of Florence. It includes the sand spits to the north and south of the Siltcoos River and is bounded by the Waxmyrtle Trail and campground to the east, and HCP-covered lands to the west. It consists of 116 federally owned ac (47 ha) managed by the USFS as the Oregon Dunes NRA in the Siuslaw National Forest.

Siltcoos River Spit was occupied at the time of listing and is currently occupied. Most recently documented Pacific Coast WSPs for this subunit include 26 breeding adults in 2011 (Lauten *et al.* 2011, p. 25).

The subunit is characteristic of a dune-backed beach and sand spit in close proximity to a tidally influenced river mouth. The subunit contains the following features essential to the conservation of the species: sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; sandy beach above the mean high water line that supports small invertebrates; and close proximity to tidally influenced freshwater areas.

Primary threats to essential physical and biological features that may require special management in this subunit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans and pets in important foraging and nesting areas; vehicle trespass into closed areas; and predators.

OR 8C, Dunes Overlook/Tahkenitch Creek Spit, 383 ac (155 ha):

We proposed 716 (290 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 333 ac (135 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This subunit is in Douglas County, about 9 mi (15 km) southwest of the City of Florence. The southern boundary of the unit is about 5.3 mi (9 km) northwest of the City of Reedsport. It is bounded by the subunit 8B to the north, a street legal vehicle area to the south, Oregon Dunes NRA to the east, and HCP-covered lands to the west. It consists of 383 federally owned ac (155 ha) managed by the USFS as the Oregon Dunes NRA in the Siuslaw National Forest.

Dunes Overlook/Tahkenitch Creek Spit was occupied at the time of listing and is currently occupied. Documented Pacific Coast WSPs for this subunit include 71 breeding plovers in 2011 (Lauten *et al.* 2011, p. 25).

The subunit is characteristic of a dune-backed beach and sand spit in close proximity to a tidally influenced river mouth and contains interdune flats created through habitat restoration. The subunit contains the following features essential to the conservation of the species: wide sand spits or overwashes and sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; sandy beach above the mean high water line that supports small invertebrates; and close proximity to tidally influenced freshwater areas.

Primary threats to essential physical and biological features that may require special management in this subunit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans in important foraging and nesting areas; and predators.

OR 8D, North Umpqua River Spit, 59 ac (24 ha):

We proposed 236 (95 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 177 ac (71 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This subunit is on the western coast of Douglas County, about 4 mi (5 km) west of the City of Reedsport. It is bounded by the Umpqua River North Jetty to the south, Oregon Dunes NRA land to the north and east, and HCP-covered lands to the west.

Subunit 8D consists of 59 ac (24 ha) of Federal land managed by the USFS for the Oregon Dunes NRA in the Siuslaw National Forest.

This subunit was not occupied at the time of listing. Nesting Pacific Coast WSPs were last documented at North Umpqua River Spit in the 1980s (ODFW unpublished data). The subunit is located between currently occupied areas and provides habitat for adult dispersal between units. Although nesting and wintering has not been recently confirmed for this area, we consider the unit is needed by the species for use in response to fluctuating habitat and resource availability.

The subunit is characteristic of a dune-backed beach in close proximity to tidally influenced freshwater areas. The subunit includes sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; sandy beach above the mean high water line that supports small invertebrates; and close proximity to tidally influenced freshwater areas, which are considered essential for the conservation of the Pacific Coast WSP.

OR 9, Tenmile Creek Spit, 223 ac (90 ha):

We proposed 244 ac (99 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 21 ac (8 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the northwestern coast of Coos County, about 11 mi (18 km) southwest of the City of Reedsport. It includes the sand spits and beaches to the north and south of the Tenmile River. This unit is on the northwestern coast of Coos County, about 11 mi (18 km) southwest of the City of Reedsport, with Winchester Bay 6.5 mi (10.5 km) to the north, Coos Bay North Jetty 15.5 mi (25 km) to the south, the City of Lakeside 2.5 mi (4 km) to the east, and HCP-covered lands to the west.

Tenmile Creek Spit was occupied at the time of listing and is currently occupied. Documented Pacific Coast WSPs for this unit include 25 breeding adults in 2011 (Lauten *et al.* 2011, p. 25). Unit OR 9 consists of 223 ac (90 ha) of Federal land managed as the Oregon Dunes NRA by the USFS.

The unit is characteristic of a dune-backed beach and sand spit in close proximity to a tidally influenced river mouth. It includes the following features essential to the conservation of the species: sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; sandy beach above the mean high water line that supports small invertebrates; and close proximity to tidally influenced freshwater areas.

Primary threats to essential physical and biological features that may require special management in this unit degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans in important foraging

and nesting areas; vehicle trespass into closed areas; and predators.

OR 10, Coos Bay North Spit, 273 ac (111 ha):

We proposed 308 (125 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 35 ac (14 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the western coast of Coos County, about 3 mi (5 km) west of the City of Coos Bay. It is bounded Oregon Dunes NRA 3 mi (4.8 km) to the north, Coos Bay North Jetty to the south, Coos Bay to the east, and HCP-covered lands to the west.

Coos Bay North Spit was occupied at the time of listing and is currently occupied. Documented Pacific Coast WSPs for this unit include 59 breeding plovers in 2011 (Lauten *et al.* 2011, p. 25). The unit consists of 273 ac (111 ha) of Federal land under the jurisdiction of the USACE, but primarily managed by the U.S. Bureau of Land Management (BLM).

The unit is characteristic of a dune-backed beach in close proximity to tidally influenced estuarine mud flats and containing interior interdune flats created through dredge material disposal or through habitat restoration. It includes the following features essential to the conservation of the species: expansive, sparsely vegetated interdune flats;

open, sandy areas that are relatively undisturbed by humans; areas of sandy beach above the mean high water line with occasional surf-cast wrack supporting small invertebrates; and close proximity to tidally influenced estuarine mud flats.

Primary threats to essential physical and biological features that may require special management in this unit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans, pets, and horses in important foraging and nesting areas; vehicle trespass into closed areas; and predators.

OR 11, Bandon to New River, 541 ac (219 ha):

We proposed 1,016 ac (411 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, Bandon State Natural Area (227 ac, 92 ha), which is owned and managed by OPRD, and 249 ac (101 ha) of private land have been excluded from critical habitat designation for this unit under section 4(b)(2) of the Act (see **Exclusions** section below).

The remaining lands of this unit are on the southwestern coast of Coos County, about 3 mi (5 km) south of the City of Bandon. The unit consists of multiple land ownerships bounded by the southern boundary of Bandon State Natural Area to the north, the New River to the east, north of the Floras Creek outlet to the south, and HCP-covered lands to the west. The unit encompasses all of New River Spit and extends behind a relatively low foredune north of Floras Creek. Sea-level rise and overwashing of these

areas during the winter months is anticipated to result in vegetation removal and the creation of additional Pacific Coast WSP breeding habitat.

New River was occupied at the time of listing and is currently occupied. Documented Pacific Coast WSPs for this unit include 20 breeding plovers in 2011 (Lauten *et al.* 2011, p. 25; Lauten 2012 pers. comm.). The BLM is the unit's primary land manager. Unit OR 11 consists of 459 ac (186 ha) of Federal land with 82 ac (33 ha) of private land.

The unit is characteristic of a dune-backed beach and barrier spit, and contains interdune flats created through habitat restoration. It includes the following features essential to the conservation of the species: wide sand spits or overwashes and sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; areas of sandy beach above the mean high water line with occasional surf-cast wrack supporting small invertebrates; and close proximity to tidally influenced freshwater areas.

Primary threats that may require special management in this unit are degradation of the sand dune system due to encroachment of European beach grass; disturbance from humans and pets in important foraging and nesting areas; vehicle trespass into closed areas; and predators.

OR 12, Elk River Spit:

Unit OR 12 has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

OR 13, Euchre Creek Spit, 9 ac (4 ha):

We proposed 116 (47 ha) for designation in this unit in our revised proposed designation of critical habitat. In this final revision, 107 ac (43 ha) of proposed critical habitat has been excluded under section 4(b)(2) of the Act (see **Exclusions** section below).

This unit is on the western coast of Curry County, approximately 10 mi (6 km) north of the City of Gold Beach. It located to the north and south of the Euchre Creek and is bounded by HCP-covered lands to the west. The unit consists of 9 ac (4 ha) of private land. The unit extends into low-elevation areas on the north and south side of Euchre Creek. Sea-level rise and overwashing of these areas during the winter months is anticipated to result in vegetation removal and the creation of additional Pacific Coast WSP breeding habitat.

Although Euchre Creek Spit was not considered occupied at the time the Pacific Coast WSP was listed in 1993, this beach is a historical nesting site. The most recently documented Pacific Coast WSP in the area was one wintering plover in 1989 (ODFW in litt. 1994, Appendix, Table 3). Although nesting and wintering have not been recently

confirmed for this area, we consider the unit is needed by the species for use in response to fluctuating habitat and resource availability. We consider the unit to be essential for the conservation of the Pacific Coast WSP as it has the capability of providing connectivity between occupied areas, dispersal habitat between units, and habitat for resting and foraging. This unit may provide habitat to support breeding Pacific Coast WSP and would facilitate interchange between otherwise widely separated units within Recovery Unit 1 (identified in the Recovery Plan, Service 2007) in Oregon and Washington.

Euchre Creek Spit is characteristic of a dune-backed beach and sand spit in close proximity to a tidally influenced river mouth. The unit includes sparsely vegetated, low-lying areas of sandy dune; open, sandy areas that are relatively undisturbed by humans; and close proximity to tidally influenced freshwater areas, which are essential for the conservation of the Pacific Coast WSP.

CALIFORNIA

CA 1, Lake Earl, 74 ac (30 ha):

This unit is located directly west of the Lake Earl/Lake Tolowa lagoon system in Del Norte County about 4 mi (7 km) north of Crescent City. The Lake Earl Lagoon spit is approximately 3 mi (5 km) in length, encompasses approximately 74 ac (30 ha), and lies approximately 2 mi (3 km) north of Point Saint George and the McNamara Airfield.

This unit was occupied at the time of listing and is currently occupied. This unit is a historical breeding site (Yocom and Harris 1975, p. 30), and has harbored a small population of wintering Pacific Coast WSP in recent years (Service unpublished data). This unit is capable of supporting 10 breeding adults with adaptive management (Service 2007, Appendix B). All 74 ac (24 ha) are managed by the State under the jurisdiction of the California Department of Fish and Game (CDFG), and California Department of Parks and Recreation (CDPR).

Essential physical or biological features of the unit for Pacific Coast WSP conservation include sandy beaches above and below the mean high-tide line, wind-blown sand in dune systems immediately inland of the active beach face, and the wash over area at the lagoon mouth.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from: degradation of the sand dune system due to encroachment of European beach grass; destruction of habitat and loss of wintering and nesting Pacific Coast WSPs from OHV use; and destruction of habitat from annual mechanical breaching (as authorized by the USACE) of the spit between the Lake Earl/Lake Tolowa Lagoon and the Pacific Ocean.

CA 2, Gold Bluffs Beach, 233 ac (94 ha):

This unit is located in Humboldt County about 5 mi (6 km) north of the Town of Orick within Prairie Creek State Park (north of Gold Bluffs Beach campground), and is managed cooperatively with Redwood National Park, collectively known as Redwood National and State Parks (RNSP). This unit was occupied at the time of listing, is currently occupied, and incorporates the primary use area of a pair of Pacific Coast WSPs that nested in Prairie Creek State Park during the summer of 2005, and is commonly used by wintering Pacific Coast WSPs.

Although not considered a main breeding location, unit CA 2 provides a fairly undisturbed location for breeding Pacific Coast WSP that lose nests to predation or other causes at various nest sites, and could offset habitat loss as sea-level rise prevents nesting at sites currently being used by plovers. One chick was fledged from the unit during 2004. Up to five Pacific Coast WSPs were observed within the unit in March 2007. The unit's primary value is as a wintering site (Service 2007, Appendix B). The site is often used as wintering habitat on an irregular basis (Service unpublished data). RNSP are actively managing the area for Pacific Coast WSP.

The northeast portion of the unit is currently vegetated with European beach grass and is, therefore, currently unsuitable for nesting. However, with restoration, that portion of the unit would be considered suitable nesting habitat. We include that portion of the unit to help offset the anticipated effects of sea-level rise over time. RNSP have restored beach habitat by removing nonnative vegetation on other portions of Gold Bluffs Beach. We anticipate similar restoration within the unit to occur sometime in the future.

The unit contains the following features essential to the conservation of the Pacific Coast WSP: low lying sandy dunes; open, sandy areas that are relatively undisturbed by humans; and sandy beach above and below the high-tide line that supports small invertebrates. Most visitor use in the area is in Fern Canyon, which is to the east of the unit and outside of suitable Pacific Coast WSP habitat. Visitation is light relative to other State and National Parks within the Pacific Coast WSP's range. Limited vehicle use of the beach is allowed for commercial and tribal fishing, and park administrative use.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human-related use from recreation and OHV use associated with commercial fishing, and European beach grass.

CA 3A, Stone Lagoon, 55 ac (22 ha):

This subunit is approximately 0.9 mi (1.5 km) in length, and is located on the Stone Lagoon spit. Stone Lagoon borders the subunit on the east, and the Pacific Ocean makes up the subunit's western edge. Subunit CA 3A is located in Humboldt County, approximately 3 mi (5 km) south of the Town of Orick.

The subunit was occupied at the time of listing and is currently occupied. Nesting has recently occurred within the subunit. In 2009, a single nest hatched three chicks, all of which fledged (Colwell, *et al.* 2009, p. 9). The Recovery Plan (Service 2007) estimates that up to 16 Pacific Coast WSPs can be supported within Unit CA 3; however, all are attributed to subunit CA 3B. Recent data indicate that the population management potential for subunit CA 3A is underestimated by the Recovery Plan (Service 2007, Appendix B), as it does contribute towards the species' reproductive success in northern California (Colwell *et al.* 2009, p. 9; Service unpublished data).

The subunit contains the following physical or biological features essential to the conservation of the Pacific Coast WSP: low-lying sandy dunes; open, sandy areas that are relatively undisturbed by humans; and sandy beach above and below the high-tide line that supports small invertebrates. Special management may be needed to control nonnative vegetation and enforce existing regulations to ensure the suitability of the subunit. With time, we anticipate that the entire subunit will be inundated with sea-level rise associated with climate change.

CA 3B, Big Lagoon, 268 ac (108 ha):

This subunit consists of a large sand spit that divides the Pacific Ocean from Big Lagoon. The northern extent of Big Lagoon Spit is located in Humboldt County and is approximately 6 mi (10 km) south of the Town of Orick. This subunit was occupied at

the time of listing and is currently occupied. Big Lagoon Spit is historical nesting habitat (Page and Stenzel 1981, p. 9), and currently maintains a winter population of fewer than 10 Pacific Coast WSPs (Service unpublished data). Recent nesting occurred within the subunit during 2005, in which a single nest hatched and fledged three chicks. We estimate the subunit can support 16 breeding adults (Service 2007, Appendix B). The subunit is located on the Big Lagoon Spit, which is approximately 4 mi (7 km) in length. Most of the subunit is managed by the CDPR. Approximately 0.6 ac (0.3 ha) are managed by Humboldt County.

Essential physical or biological features of the subunit that contribute towards the conservation of the Pacific Coast WSP include: low-lying sandy dunes and open, sandy areas that are relatively undisturbed by humans; and sandy beach above and below the high-tide line that supports small invertebrates.

CDPR has conducted habitat restoration at this unit through the hand-removal of nonnative vegetation. The primary threat to wintering and breeding Pacific Coast WSPs that may require special management is disturbance from humans and pets from walking through winter flocks and potential nesting areas.

Other threats requiring management include control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the entire subunit will be inundated with sea-level rise associated with climate change.

CA 4A, Clam Beach/Little River, 337 ac (136 ha):

The subunit is located in Humboldt County immediately west and north of the Town of McKinleyville. The Clam Beach/Little River subunit's northern boundary is directly across from the south abutment of the U.S. Highway 101 Bridge that crosses the Little River. The southern subunit boundary is aligned with the north end of the southernmost, paved Clam Beach parking area. The length of the subunit is approximately 2 mi (3 km). Approximately 222 ac (90 ha) are State owned.

This subunit was occupied at the time of listing and is currently occupied. During 2003, the subunit supported a breeding population of approximately 12 Pacific Coast WSPs, and a winter population of up to 55 plovers (Service unpublished data). This subunit is one of four primary nesting locations within northern California. Based on the Recovery Plan (Service 2007, Appendix B), we expect the subunit to be capable of supporting six pairs of breeding Pacific Coast WSPs.

Essential physical or biological features of the subunit that contribute towards the conservation of the Pacific Coast WSP include large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to sparsely vegetated terrain. Special management is needed to control nonnative vegetation and enforcement of existing human-use regulations. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

CA 4B, Mad River Beach, 452 ac (183 ha):

The subunit is located in Humboldt County immediately west of the Town of McKinleyville. This subunit was largely swept clean of European beach grass when the Mad River temporarily shifted north in the 1980s and 1990s. The Mad River Beach subunit is approximately 3 mi (5 km) long, and ranges from the U.S. Highway 101 Vista Point below the Arcata-Eureka Airport in the north, to School Road in the south. Approximately 161 ac (65 ha) are owned and managed by Humboldt County, and 143 ac (58 ha) are privately owned. The remaining 148 ac (60 ha) are managed by the State, and consist of the intertidal zone. Upon recalculation of ownership data, we discovered that the overall subunit area is approximately 4 ac (2 ha) smaller than proposed.

This subunit was occupied at the time of listing and is currently occupied. We expect it to eventually support 12 breeding Pacific Coast WSPs with proper management (Service 2007, Appendix B). The current breeding population is believed to be less than five Pacific Coast WSPs, although plovers from this subunit readily intermix with plovers in CA 4A and elsewhere (Colwell *et al.* 2009, p. 9; Service unpublished data). Occasional winter use by Pacific Coast WSPs has been intermittently documented, with most wintering within the adjacent critical habitat subunit to the north (Service unpublished data).

Essential physical or biological features of the subunit that contribute towards the

conservation of the Pacific Coast WSP include large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to sparsely vegetated terrain. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

Potential threats to nests, chicks, and both wintering and breeding adult Pacific Coast WSPs that may require special management are: nonnative vegetation, OHV use, and disturbance caused by equestrians (*i.e.*, people riding horses) and humans with accompanying pets.

CA 5A, Humboldt Bay South Spit Beach, 572 ac (231 ha):

This subunit is located in Humboldt County adjacent to Humboldt Bay, less than 1 mi west of the City of Eureka, with the southern boundary being Table Bluff. Approximately 542 ac (219 ha) of the unit are owned by the CDFG and State Lands Commission, but are managed by BLM; 10 ac (4 ha) are owned and managed by Humboldt County; and 20 ac (8 ha) are owned by the USACE. The subunit is 5 mi (8 km) in total length.

This subunit was occupied at the time of listing and is currently occupied. The Pacific Coast WSP wintering population within the subunit is estimated at fewer than 15

individuals. Three nests, from four breeders, were attempted within the subunit in 2003 (Service unpublished data). This subunit is capable of supporting 30 breeding Pacific Coast WSPs (Service 2007, Appendix B). The BLM has conducted habitat restoration within the subunit, in consultation with us.

The following physical or biological features essential to the conservation of the Pacific Coast WSP can be found within the unit: large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to sparsely vegetated terrain. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, OHV use, and disturbance from equestrians and humans with pets.

CA 5B, Eel River North Spit and Beach, 464 ac (188 ha):

This subunit is located in Humboldt County about 4 mi (7 km) east of the Town of Loleta and stretches from Table Bluff on the north to the mouth of the Eel River in the south. The subunit is estimated to be 3.9 mi (7 km) long, and is managed by the State,

except for 7 ac (3 ha) of private land.

This subunit was occupied at the time of listing and is currently occupied with a wintering population of Pacific Coast WSPs estimated at fewer than 20 (Service unpublished data). As many as 11 breeders have been observed during breeding season window surveys, with a breeding population estimated at less than 15 (Colwell *et al.* 2009, p. 9). We expect this subunit to eventually support 20 breeding Pacific Coast WSPs with proper management (Service 2007, Appendix B).

Essential physical or biological features of the subunit include: large areas of sandy, sparsely vegetated dunes for reproduction and normal behavior, and areas of sandy beach above and below the high-tide line supporting small invertebrates for foraging. Surf-cast organic debris is an important component of the habitat in this subunit, providing shelter from the wind both for nesting Pacific Coast WSPs and for invertebrate prey species. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, predators, OHVs, and disturbance from equestrians and humans with pets.

CA 5C, Eel River South Spit and Beach, 336 ac (136 ha):

This subunit, located in Humboldt County, encompasses the beach segment from the mouth of the Eel River, south to Centerville Road, approximately 4 mi (7 km) west of the City of Ferndale. The subunit is 5 mi (8 km) long; 160 ac (65 ha) are private, with 4 ac (2 ha) managed by Humboldt County. Approximately 172 ac (70 ha) are managed by the State.

This subunit was occupied at the time of listing, is currently occupied, and capable of supporting 20 breeding Pacific Coast WSPs. A single nest was found during the 2004 breeding season (Colwell *et al.* 2004, p. 7). The winter population is estimated at fewer than 80 plovers, many of which breed on the Eel River gravel bars (CA 5) (Service unpublished data).

Essential physical or biological features of the subunit include: large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to sparsely vegetated terrain for foraging. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species

may require special management considerations or protection to address the main threats from nonnative vegetation, predators, OHVs, and disturbance from equestrians and humans with pets.

CA 6, Eel River Gravel Bars; 1,349 ac (546 ha):

This unit, located in Humboldt County, is largely inundated during winter months due to high flows in the Eel River. The unit is 6.4 mi (8 km) from the City of Fernbridge, and includes gravel bars between Fernbridge and the confluence of the Van Duzen River. The Eel River is contained by levees in this section, and consists of gravel bars and wooded islands. The unit contains a total of 1,349 ac (546 ha), of which 176 ac (71 ha) are owned and managed by Humboldt County, 304 ac (123 ha) are under the jurisdiction of the California State Lands Commission, and 869 ac (352 ha) are privately-owned.

This unit was occupied at the time of listing, is currently occupied, and capable of supporting 40 breeding Pacific Coast WSPs. Surveys have documented 22 breeding birds in this unit; however, those numbers have dropped off in recent years (Colwell *et al.* 2009, p. 9; Service unpublished data).

Essential physical or biological features of this unit include bare, open gravel bars comprised of both sand and cobble, which support reproduction and foraging. This unit harbors the most important breeding habitat in California north of San Francisco Bay, and has the highest fledging success rate of any area from Mendocino County to the Oregon

border.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from predators, OHVs, disturbance from gravel mining, and humans with pets. Gravel mining is managed through a Clean Water Act permit issued by the USACE.

CA 7, MacKerricher Beach, 1,218 ac (493 ha):

This unit is approximately 3.5 mi (5.6 km) long. The unit is just south of the Ten Mile River, and approximately 4 mi (6 km) north of the City of Fort Bragg located in Mendocino County. The State manages approximately 1,144 ac (463 ha), and 74 ac (30 ha) are privately owned. CDPR has been conducting removal of European beach grass to improve habitat for the Pacific Coast WSP and other sensitive dune species within the unit.

This unit was occupied at the time of listing, is currently occupied, and is capable of supporting 20 breeding Pacific Coast WSPs (Service 2007, Appendix B). The current breeding population is estimated at fewer than 10 (Colwell *et al.* 2009, p. 9). The winter population of plovers is fewer than 45 (Service unpublished data).

Essential physical or biological features of the unit include: large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to

sparsely vegetated terrain. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, predators, and disturbance from equestrians and humans with pets.

CA 8, Manchester Beach, 505 ac (204 ha):

The Manchester Beach unit is approximately 3.5 mi (6 km) long and located in Mendocino County about 1 mi (2 km) west of the Town of Manchester. The State manages 425 ac (172 ha) of the unit, 68 ac (28 ha) are federally managed, and the remaining 12 ac (5 ha) are privately owned. This unit is occupied and provides an important wintering site for Pacific Coast WSPs in the region (Service 2007, Appendix B). In 2003, a pair of Pacific Coast WSPs nested within the unit, and successfully hatched two chicks. However, those chicks did not survive (Colwell *et al.* 2004, p. 7). The current wintering population is estimated at fewer than 20 (Service unpublished data).

Although occupancy at the time of listing has not been confirmed, we consider

this unit essential for the conservation of the species based on the fluctuating use of areas by the species as a response to habitat and resource availability. The unit is located adjacent to currently occupied areas and provides dispersal habitat between units. This unit provides habitat to support breeding Pacific Coast WSPs, will facilitate interchange between otherwise widely separated units, and helps provide habitat within a Recovery Unit identified in the Recovery Plan (Service 2007).

The unit contains large areas of sandy dunes, areas of sandy beach above and below the high-tide line, and generally barren to sparsely vegetated terrain, which are essential for the conservation of the Pacific Coast WSP.

CA 9, Dillon Beach, 39 ac (16 ha):

This unit is located at the mouth of Tomales Bay, in Marin County, just south of the Town of Dillon Beach. It stretches for about 0.7 mi (1 km) north from Sand Point. The unit was occupied at the time of listing, is currently occupied, and is an important wintering area for the species. Seventy-five wintering Pacific Coast WSPs were counted at this location during the January 2007 winter window survey (Service 2007, p. 4). The unit does not extend as far north as did the unit proposed for Dillon Beach in 2004 (69 FR 75607, December 17, 2004), because subsequent site visits and discussions with local Pacific Coast WSP surveyors have established that Pacific Coast WSPs only rarely used the area north of the unit we are designating in this rule. The unit is entirely on private land.

Essential physical or biological features provided by the unit include surf cast debris supporting small invertebrates for foraging, and large stretches of relatively undisturbed, sparsely vegetated, sandy beach, both above and below high-tide line, for foraging and potentially for nesting.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, predators, and disturbance by humans and their pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 10A, Point Reyes, 460 ac (186 ha):

This subunit is located in Marin County to the west of the unincorporated Community of Inverness and occupies most of the west-facing beach between Point Reyes and Tomales Point. It is located entirely within the Point Reyes National Seashore, and consists primarily of dune-backed beaches. This unit was occupied at the time of listing, is currently occupied, supports both nesting and wintering Pacific Coast WSPs, and has the potential to support 50 breeding birds with proper management (Service 2007, Appendix B).

The Point Reyes unit includes the following PCEs essential to Pacific Coast WSP conservation: sparsely vegetated sandy beach above and below high-tide for nesting and foraging, wind-blown sand dunes for nesting and predator avoidance, and tide-cast debris attracting small invertebrates for foraging. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, disturbance by humans and pets, and predators (particularly corvids).

CA 10B, Limantour, 156 ac (63 ha):

Limantour is a roughly 2.25-mi (4-km) sand spit at the north end of Drake's Bay located in Marin County to the west of the unincorporated Community of Olema. The subunit includes the end of the spit, and narrows to include only the south-facing beach towards the base of the spit. It is completely within the Point Reyes National Seashore. This unit was occupied at the time of listing, is currently occupied, and can support both nesting and wintering Pacific Coast WSPs, although nesting has not been documented since 2000 (Stenzel *in litt.* 2004, p. 3; Service 2009, p. 3). Ninety-eight wintering plovers were counted at the site during the January 2007 window survey (Service 2007, p. 4).

The subunit is expected to contribute significantly to plover conservation in the region by providing habitat capable of supporting 10 nesting birds (Service 2007, Appendix B).

PCEs at the subunit include sparsely vegetated beach sand, above and below high-tide for nesting and foraging, and tide-cast debris supporting small invertebrates. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the subunit. With time, we anticipate that the lower portions of this subunit will be inundated with sea-level rise associated with climate change.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, disturbance by humans and pets, and nest predators such as crows and ravens.

CA 11, Napa-Sonoma Marshes, 618 ac (250 ha):

This unit encompasses salt evaporation ponds 7 and 7A, in the Napa-Sonoma Marshes Wildlife Area, owned by the CDFG. It is situated in Napa County, about 2.3 mi (4 km) west of the Napa County Airport, and about 1.5 mi (2.4 km) south of Las Amigas Road. The unit was occupied at the time of listing and is currently occupied. Twelve Pacific Coast WSPs were identified at the location in the summer 2009, during window surveys (Service 2009, p. 2). This is the only location in the northern portion of the San Francisco Bay known to support nesting Pacific Coast WSPs.

Essential physical or biological features provided by the unit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds, and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, flooding, and nest predators such as great egrets (*Casmerodius albus*) and common ravens (*Corvus corax*) (Robinson-Nilsen *et al.* 2009, p. 14). Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 12, Hayward, 1 ac (0 ha):

This unit comprises Island 5 at the Hayward Regional Shoreline Park, located to the west of the City of Hayward in Alameda County. The area is managed by the East Bay Regional Park District (EBRPD) as a nesting area for shorebirds—primarily least terns (*Sterna antillarum browni*), but also Pacific Coast WSPs (Riensch 2007, p. 1). The unit was occupied at the time of listing and is currently occupied. Three Pacific Coast WSPs chicks from one nest successfully fledged from the unit in 2008 (Riensch 2008, p. 2; Robinson *et al.* 2008, pp. 19, 34), but since then seven plover nesting attempts

in the area have failed, primarily due to predation (Robinson-Nilsen *et al.* 2009, pp. 16, 32; Robinson-Nilsen 2010, pers. comm.). The most commonly observed avian predators at the site have been California gulls (*Larus californicus*), although the only actual depredation observed was by a killdeer (*Charadrius vociferus*) (Robinson-Nilsen *et al.* 2009, pp. 14, 16). Essential physical or biological features provided by the unit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds, and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from predation, salt pond management, and non-native vegetation. The EBRPD is implementing a predator management program utilizing numerous volunteers as well as staff from the U.S. Department of Agriculture's (USDA) Wildlife Services program (Riensch 2008, p. 2) to reduce predation at this site.

CA 13A, Eden Landing: 237 ac (96 ha):

This subunit encompasses salt ponds E11, E15B, and E16B, just south of highway 92 and the San Mateo Bridge and west of Union City in Alameda County. This unit was occupied at the time of listing, is currently occupied, and supported a total of 30 Pacific Coast WSP nests in 2009, 15 of which hatched (Robinson-Nilsen *et al.* 2009, p. 32). Approximately 228 ac (92 ha) are State owned. Approximately 8 ac (3 ha) are privately owned. Essential features provided by the subunit include sparsely vegetated areas above

daily high tides, such as salt pans, artificial salt ponds, and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from flooding and avian nest predators such as California gulls (Robinson-Nilsen *et al.* 2009, p. 13).

CA 13B, Eden Landing, 171 ac (69 ha):

This subunit is located west of Union City in Alameda County and encompasses salt pond E14, just south of Eden Creek. This subunit was occupied at the time of listing, is currently occupied, supported nine Pacific Coast WSP nests in 2009, three of which hatched young (Robinson-Nilsen *et al.* 2009, p. 32). The subunit does not include salt ponds E12 and E13 (just north of E14), because those are being converted to high salinity ponds for birds such as eared grebes (*Podiceps nigricollis*) and phalaropes (*Phalaropus* spp.) that forage well on such habitat (Strong 2010a, p. 1). The entire subunit is State owned. Essential features provided by the subunit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats

from flooding and avian nest predators such as California gulls (Robinson-Nilsen *et al.* 2009, p. 13).

CA 13C, Eden Landing, 609 ac (246 ha):

This subunit encompasses salt ponds E6A and E6B, and is located just north of Old Alameda Creek and west of Union City in Alameda County. This unit was occupied at the time of listing, is currently occupied, and supported a total of two Pacific Coast WSP nests in 2009, both of which hatched young (Robinson-Nilsen *et al.* 2009, p. 32). The subunit does not include a panhandle-shaped area of potential habitat just north of pond E6A because it is being converted to tidal marsh as part of a restoration project started before the South Bay Salt Pond Restoration Project (Strong 2010b, p. 7; Strong 2010c, p. 1). Essential physical or biological features provided by the subunit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds, and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from flooding and avian nest predators such as California gulls (Robinson-Nilsen *et al.* 2009, p. 13).

CA 14, Ravenswood, 89 ac (36 ha):

This unit consists of the southwestern portion of salt pond SF2 located east of the City of East Palo Alto in San Mateo County near the western approach to the Dumbarton Bridge. Pond SF2 is undergoing renovations intended to provide ponded areas, islands, and salt pan for several species of shorebirds, including Pacific Coast WSPs (South Bay Salt Pond Restoration Project 2010, p. 3). The Ravenswood unit is drawn to encompass the salt pan area (Strong 2010b, pp. 3, 4). This unit was occupied at the time of listing and is currently occupied. In 2009, pond SF2 supported 23 Pacific Coast WSPs nests, 17 of which hatched young (Robinson-Nilsen *et al.* 2009, p. 32). The entire unit is privately owned. Essential physical or biological features provided by the unit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from flooding and avian nest predators such as California gulls (Robinson-Nilsen *et al.* 2009, p. 13).

CA 15, Warm Springs, 168 ac (68 ha):

This unit encompasses the northeastern portion of salt evaporation ponds A22 and A23 in the Warm Springs area of the South San Francisco Bay near Foster City in San Mateo County. This unit was occupied at the time of listing and is currently occupied. Fourteen breeding Pacific Coast WSPs were identified at these ponds during the 2009

summer window surveys (Service unpublished data). Additionally, Robinson-Nilsen *et al.* (2009, p. 32) found a total of 21 Pacific Coast WSPs nests at the ponds in 2009, 11 of which successfully hatched young. The southwestern portions of the ponds are excluded in keeping with tidal marsh restoration plans envisioned under the draft Tidal Marsh Recovery Plan (Service 2009, p. 266). The entire unit is federally owned.

Essential physical or biological features provided by the unit include sparsely vegetated areas above daily high-tides, such as salt pans, artificial salt ponds, and adjoining levees, for nesting and foraging.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from flooding and avian nest predators such as California gulls (Robinson-Nilsen *et al.* 2009, p. 13).

CA 16, Half Moon Bay, 36 ac (15 ha):

This unit is located next to the City of Half Moon Bay in San Mateo County and stretches for about 1.25 mi (2 km) along Half Moon Bay State Beach, and is entirely within CDPR land. The essential features of this unit include sandy beach above and below the high-tide line for nesting and foraging, and surf-cast debris to attract small invertebrates. This unit was occupied at the time of listing and is currently occupied. Small numbers of breeding Pacific Coast WSPs have been found at the location in the

past five surveys (Service 2009, p. 3). The unit also supports a sizeable winter flock, consisting of 50 Pacific Coast WSPs in 2007 (Service 2007, p. 4). We expect the unit to eventually support 10 breeding Pacific Coast WSPs in the unit under proper management (Service 2007).

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, disturbance by humans and pets, and nest predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 17, Waddell Creek Beach, 25 ac (10 ha):

This unit includes the mouth of Waddell Creek and is located about 20 mi (32 km) north of the City of Santa Cruz in Santa Cruz County. It extends about 0.6 mi (1 km) north along the coast from a point about 0.4 mi (0.6 km) south of the creek mouth to a point about 0.2 mi (1 km) north of the creek mouth. Unit CA 17 encompasses approximately 19 ac (8 ha) of State land and 6 ac (2 ha) of private land. This unit was occupied at the time of listing, and the unit has historically (prior to 2004) been an important breeding and wintering site, supporting up to 11 breeding and up to 50 wintering Pacific Coast WSPs (Service unpublished data). Although Pacific Coast WSPs have not been documented in recent years, we consider this unit presently occupied based

on the fluctuating use of areas by the species as a response to habitat and resource availability. The unit is located between currently occupied areas and provides dispersal habitat between units. This unit provides habitat to support breeding plovers, will facilitate interchange between otherwise widely separated units, and helps provide habitat within Recovery Unit 4 (identified in the Recovery Plan, Service 2007) along the central California Coast.

This unit includes the following physical or biological features essential to the conservation of the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation and human disturbance. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 18, Scott Creek Beach, 23 ac (9 ha):

This unit includes the mouths of Scott and Molino Creeks and is located about 13 mi (21 km) north of the City of Santa Cruz in Santa Cruz County. It extends about 0.7 mi

(1 km) north along the coast from the southern end of the sandy beach, 0.3 mi (0.5 km) south of Molino Creek, to a point about 0.1 mi (0.2 km) north of Scott Creek. Unit CA 18 encompasses approximately 15 ac (6 ha) of State land and 8 ac (3 ha) of local jurisdictional land. This unit was occupied at the time of listing and is currently occupied, and recent surveys have found up to 4 breeding Pacific Coast WSPs, while historical surveys (prior to 2004) have found up to 12 breeding plovers occupying the area (Service unpublished data). Unit CA 18 is an important wintering area, with up to 129 Pacific Coast WSPs recorded in a single season (Service unpublished data).

This unit is essential to the conservation of the species because, with proper management, and in conjunction with the other two relatively small units designated in Santa Cruz County (CA 17 and 19), it can attract additional breeding Pacific Coast WSPs and thereby facilitate interchange between the larger units at Half Moon Bay (CA 16).

The unit includes the following habitat physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the

suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 19, Wilder Creek Beach, 15 ac (6 ha):

This unit is located at the mouth of Wilder Creek and is about 1 mi (1.6 km) west of the city of Santa Cruz, in Santa Cruz County. It extends about 0.25 mi (0.40 km) along the coast encompassing the sandy beach at the mouth of Wilder Creek. The unit is situated on State-owned (14 ac (6 ha)) and private (1 ac (0.4 ha)) land. This unit was occupied at the time of listing and is currently occupied. Although nesting in this area has been uncommon in recent years, it has historically been an important snowy plover nesting area, with up to 16 birds nesting each year (Service 2007, Appendix B) and is also an important Pacific Coast WSP wintering area, with up to 52 birds each winter (Service 2007, Appendix B). Unit CA 19 is capable of supporting 16 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B).

This unit is essential to the conservation of the species because, with proper management, and in conjunction with the other two relatively small units in Santa Cruz County (CA 17 and 18), it can attract additional breeding Pacific Coast WSPs and thereby facilitate interchange between the larger units at Half Moon Bay (CA 16) and Jetty Road to Aptos (CA 20). The unit includes the following features essential to the species: areas of sandy beach above and below the high tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging) and generally barren to

sparsely vegetated terrain (for foraging and predator avoidance).

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, development, OHV use, pets, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 20, Jetty Road to Aptos, 399 ac (161 ha):

This unit is located about 5 mi (8 km) west of the City of Watsonville and includes Sunset State Beach located in Santa Cruz County and Zmudowski State Beach and Moss Landing State Beach, both located in Monterey County. The mouth of the Pajaro River is located near the center of the subunit, and is designated as a Natural Preserve within Zmudowski State Beach. Elkhorn Slough is at the south end of the subunit. It extends about 8 mi (13 km) along the coast from Elkhorn Slough to Zils Road. Approximately 369 ac (149 ha) are State owned. The remaining 30 ac (12 ha) are privately owned. This unit was occupied at the time of listing; is currently occupied; is an important breeding area, with as many as 105 breeding Pacific Coast WSPs each year; and is also an important wintering area, with up to 250 plovers each winter (Service unpublished data).

The unit includes the following habitat physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, development, horses, OHV use, pets, predators, and habitat changes resulting from exotic vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 21, Elkhorn Slough Mudflats, 281 ac (114 ha):

This unit is located about 3.5 mi (6 km) north of the City of Castroville along the north side of Elkhorn Slough east of Highway 1 located in Monterey County. This unit is 1.5 mi (2 km) long, extending about 1 mi (2 km) along the north shore of Elkhorn Slough east of Highway 1 and about 0.5 mi (1 km) north from Elkhorn Slough to Bennett Slough. The unit is situated entirely on State-owned land. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area, with as many as 41 breeding Pacific Coast WSPs each year, and is also an important wintering area, with

up to 137 plovers each winter (Service unpublished data). This unit is capable of supporting 80 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B).

The unit includes the following habitat physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and mud flat and salt pan habitat with generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, development, horses, OHV use, pets, predators, and habitat changes resulting from exotic vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 22, Monterey to Moss Landing, 959 ac (388 ha):

This unit includes the beaches along the southern half of Monterey Bay from the City of Monterey at the south end of the unit to Moss Landing and the mouth of Elkhorn Slough at the north end of the unit in Monterey County. The mouth of the Salinas River is a Natural Preserve under State Parks, and is located near the center of the unit. Both

the Salinas River and Marina Dunes Natural Preserves are within the unit. The unit extends about 15 mi (24 km) north along the coast from Monterey to Moss Landing. Unit CA 22 includes approximately 285 ac (115 ha) of State lands, 36 ac (14 ha) of local lands, and 415 ac (168 ha) of Federal land. The remainder is privately owned. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area, with as many as 162 breeding Pacific Coast WSPs each year, and is also an important wintering area, with up to 363 plovers each winter (Service unpublished data).

The unit includes the following physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, development, horses, OHV use, pets, predators, and habitat changes resulting from exotic vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 23, Point Sur Beach, 72 ac (29 ha):

This unit is about 17 mi (27 km) south of the City of Monterey and immediately north of Point Sur State Historic Park (SHP) in Monterey County. It extends about 0.7 mi (1 km) north along the coast from Point Sur SHP, and includes the Point Sur Dunes Natural Preserve. This unit encompasses approximately 38 ac (15 ha) of State land and 34 ac (14 ha) of private land. This unit was occupied at the time of listing, is currently occupied, and has supported up to 13 breeding Pacific Coast WSPs each year (Service unpublished data). This unit is capable of supporting 20 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B). Unit CA 23 is an important wintering area, historically supporting up to 65 plovers each winter (Service unpublished data).

The unit includes the following habitat physical or biological features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance and habitat changes resulting from exotic vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 24, San Carpoforo Creek, 24 ac (10 ha):

This unit is located approximately 20 mi (32 km) north of the Town of Cambria and 2.5 mi (4 km) south of the San Luis Obispo/Monterey County boundary in San Luis Obispo County. It extends approximately 0.57 mi (1 km) along the coast. This unit contains approximately 4 ac (2 ha) of land owned by the USFS, 18 ac (7 ha) owned by the CDPR, and 2 ac (1 ha) of private land. The unit was occupied at the time of listing, is currently occupied, and has supported as many as nine breeding Pacific Coast WSPs; however, breeding does not occur here every year (Service unpublished data). This unit is capable of supporting 10 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B). This unit consistently supports 40 to 50 wintering plovers (Service unpublished data). San Carpoforo Creek is approximately 53 mi (84 km) south of the closest unit to the north (CA 23, Point Sur), and approximately 11 mi (18 km) north of the closest unit to the south (CA 25, Arroyo Laguna Creek). Therefore, this unit may facilitate interchange between widely separated habitats.

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats

from human disturbance, pets, and dune-stabilizing vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 25, Arroyo Laguna Creek, 28 ac (11 ha):

This unit is located 11 mi (8 km) south of San Carpoforo Creek and 10 mi (16 km) north of the Town of Cambria in San Luis Obispo County. It extends approximately 0.9 mi (2 km) along the coast from a rocky headland 0.2 mi (0.3 km) south of Adobe Creek to 0.2 mi (0.3 km) north of Oak Knoll Creek. This unit encompasses approximately 18 ac (7 ha) of land owned by the CDPR and 10 ac (4 ha) of private land. This unit was occupied at the time of listing and is currently occupied. Arroyo Laguna Creek has historically (prior to 2000) been an important site, supporting as many as 6 breeding and 91 wintering Pacific Coast WSPs; however, neither breeding nor wintering occurs here every year (Service unpublished data). This unit is capable of supporting six breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B). This unit is roughly equidistant between CA 24 (San Carpoforo Creek) and CA 26 (San Simeon State Beach) and may facilitate interchange between widely separated habitats.

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates (for nesting and foraging)

and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, pets, and dune-stabilizing vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 26, San Simeon State Beach, 24 ac (10 ha):

This unit is located about 2 mi (3 km) north of the Town of Cambria in San Luis Obispo County. It extends about 0.9 mi (2 km) along the coast from a point opposite the intersection of Highway 1 and Moonstone Beach Drive to the northwestern corner of San Simeon State Beach. Unit CA 26 is owned by the CDPR. The unit was occupied at the time of listing and is currently occupied. San Simeon State Beach has supported as many as seven breeding Pacific Coast WSPs; however, breeding does not occur here every year (Service unpublished data). This unit is an important wintering area with up to 143 plovers recorded in a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to

sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, pets, and dune-stabilizing vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 27, Villa Creek Beach, 20 ac (8 ha):

This unit is located about 3.5 mi (6 km) northwest of the Community of Cayucos in San Luis Obispo County. It extends 0.3 mi (0.5 km) northwest along the beach from an unnamed headland 1.4 mi (2 km) north of Point Cayucos to an unnamed headland northwest of Villa Creek. This unit is owned by the CDPR. This unit was occupied at the time of listing, is currently occupied, and is an important breeding and wintering site. This unit has supported as many as 33 breeding Pacific Coast WSPs in a single season (Service unpublished data). Wintering numbers vary widely from year to year, with 10 to 112 plovers recorded over the last 7 seasons (Service unpublished data).

This unit includes the following physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated

terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, pets, horses, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 28, Toro Creek, 34 ac (14 ha):

This unit is located about 3 mi (5 km) north of the City of Morro Bay in San Luis Obispo County, extending from 0.4 mi (1 km) north of Toro Creek Road to 0.5 mi (1 km) south of Toro Creek Road (total length: 0.9 mi (1 km)). This unit was occupied at the time of listing, is currently occupied, and was historically (prior to 2000) an important breeding area, having supported as many as 16 breeding Pacific Coast WSPs (Service unpublished data). Breeding has not occurred at this unit in the last 5 seasons; however, the unit is capable of supporting 25 breeding plovers under proper management (Service 2007, Appendix B). This unit is an important wintering area with up to 121 Pacific Coast WSPs recorded in a single season (Service unpublished data). The unit encompasses approximately 11 ac (4 ha) of State land and 23 ac (9 ha) of private land.

This unit includes the following physical or biological features essential to the

species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, pets, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 29, Atascadero Beach/Morro Strand State Beach, 213 ac (86 ha):

This unit is located at Morro Strand State Beach just north of the City of Morro Bay in San Luis Obispo County. It extends about 2.25 mi (4 km) north along the beach from the parking area northeast of Morro Rock to an unnamed rocky outcrop opposite the end of Yerba Buena Street at the north end of the City of Morro Bay. This unit encompasses approximately 64 ac (26 ha) of State land, 51 ac (21 ha) of local jurisdictional land, and 98 ac (40 ha) of private land. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area, having supported as many as 24 breeding Pacific Coast WSPs in a single season (Service unpublished data). The unit is capable of supporting 40 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B). This unit is also an important wintering area,

with up to 249 plovers being recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, pets, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 30, Morro Bay Beach, 1,076 ac (435 ha):

This unit is located at Montana de Oro State Park south of Morro Rock and adjacent to the City of Morro Bay in San Luis Obispo County. It extends 5.5 mi (9 km) north along the beach from a rocky outcrop about 350 ft (105 m) north of Hazard Canyon to the northern tip of the sand spit. This unit encompasses approximately 948 ac (383 ha) of State land, 69 ac (28 ha) of local jurisdictional land, and 60 ac (24 ha) of private land. This unit was occupied at the time of listing, is currently occupied, and is an important

breeding area, supporting as many as 205 breeding Pacific Coast WSPs in a single season (Service unpublished data). Morro Bay Beach is also an important wintering area, supporting up to 104 plovers during a single over the last seven seasons (Service unpublished data).

This unit includes the following physical or biological features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, horses, pets, predators, and dune-stabilizing vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 31, Pismo Beach/Nipomo Dunes, 1,652 ac (669 ha):

This unit is located south of the City of Grover Beach and west of the Town of Oceano and extends from San Luis Obispo County into northern Santa Barbara County west of the City of Guadalupe. The unit has approximately 242 ac (98 ha) of Federal land, 552 ac (223 ha) of State land, 377 ac (152 ha) of local jurisdictional land, and 481

ac (195 ha) of private land. This unit extends about 12 mi (19 km) along the beach from a point about 0.4 mi (1 km) north of Mussel Point to a point on the north side of Arroyo Grande Creek at the south end of Strand Way in the Town of Oceano. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area, having supported as many as 162 breeding Pacific Coast WSPs in a single season (Service unpublished data). This unit is capable of supporting 350 breeding Pacific Coast WSPs under proper management (Service 2007, Appendix B). Pismo Beach/Nipomo Dunes is an important wintering area, having supported up to 287 Pacific Coast WSPs during a single season over the last 7 years (Service unpublished data). The unit includes portions of Pismo State Beach and Oceano Dunes SVRA, owned and managed by the CDPR; the Guadalupe-Nipomo Dunes National Wildlife Refuge, owned and managed by the Service; the Guadalupe Oil Field, owned and managed by the Chevron Corporation; and Rancho Guadalupe County Park, owned and managed by the County of Santa Barbara.

This unit includes the following physical or biological features essential to the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, OHVs, horses, pets, and predators.

Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 32, Vandenberg North, CA 33, Vandenberg South:

Pursuant to section 4(a)(3) of the Act, we have exempted units CA 32 (711 ac (288 ha)), and CA33 (424 ac (172ha)), from critical habitat designation (see **Exemptions** section below).

CA 34, Devereaux Beach, 52 ac (21 ha):

This unit is located on the University of California's Coal Oil Point Natural Reserve, about 7 mi (11 km) west along the coast from the City of Santa Barbara in Santa Barbara County. The unit extends about 1.8 mi (3 km) north along the coast from the western boundary of Isla Vista County Park to a point along the beach opposite the end of Santa Barbara Shores Drive. This unit consists of 43 ac (17 ha) of State land and 9 ac (4 ha) of local jurisdictional land. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area with as many as 39 breeding Pacific Coast WSPs recorded in a single season (Service unpublished data). This unit is also an important wintering area with up to 360 Pacific Coast WSPs recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, pets, and predators. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated with sea-level rise associated with climate change.

CA 35, Santa Barbara Beaches, 65 ac (26 ha):

This unit is located within the City of Santa Barbara in Santa Barbara County. It extends about 1.8 mi (3 km) along the coast from the Andree Clark Bird Refuge intersection with the Pacific Ocean to the Santa Barbara Harbor. This unit encompasses approximately 30 ac (12 ha) of State land, 35 ac (14 ha) of City of Santa Barbara lands, and 0.3 ac (0.1 ha) of private land. The unit was occupied at the time of listing and is currently occupied. The unit is an important wintering area with up to 111 Pacific Coast WSPs recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the

conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, development, and pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 36, Santa Rosa Island Beaches, 586 ac (237 ha):

This unit is located on Santa Rosa Island about 31 mi (50 km) southwest of the City of Santa Barbara in Santa Barbara County. This unit is comprised of 11 different beaches (subunits CA 36A through CA 36K) around the island. This unit encompasses approximately 586 ac (237 ha) of Channel Islands National Park land. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area with as many as 37 breeding Pacific Coast WSPs recorded in a single season (Service unpublished data). This unit is capable of supporting 130 breeding plovers under proper management (Service 2007, Appendix B). This is also an important wintering area with up to 242 plovers recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, and direct disturbance from expanding marine mammal populations. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 37, San Buenaventura Beach, 70 ac (28 ha):

This unit is located within the City of Ventura in Ventura County. It extends about 2 mi (3 km) north along the coast from rock groin, immediately north of Marina Park to the Ventura Pier. San Buenaventura State Beach is a unit that is owned by the CDPR. This unit was occupied at the time of listing and is currently occupied. It is an important wintering area with up to 72 Pacific Coast WSPs recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, and pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 38, Mandalay Beach to Santa Clara River, 672 ac (272 ha):

This unit is located near the City of Oxnard in Ventura County. It extends about 6 mi (10 km) north along the coast from the north jetty of Channel Islands Harbor to a point about 0.5 mi (1 km) north of the Santa Clara River mouth. This unit encompasses approximately 213 ac (86 ha) of private land and 459 ac (186 ha) of State land within McGrath and Mandalay State Beaches. This unit was occupied at the time of listing and is currently occupied. It is an important breeding area with as many as 70 breeding Pacific Coast WSPs recorded in a single season (Service unpublished data). This unit is also an important wintering area with up to 129 plovers recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human disturbance, development, pets, and dune-stabilizing vegetation. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 39, Ormond Beach, 320 ac (130 ha):

This unit is located near the cities of Port Hueneme and Oxnard in Ventura County. It extends about 3 mi (5 km) northwest along the coast from Arnold Road and the boundary of Naval Base Ventura County, Point Mugu (NBVC, Point Mugu) to the south jetty of Port Hueneme. This unit encompasses approximately 161 ac (65 ha) of private land and 159 ac (65 ha) of State land. This unit was occupied at the time of listing, is currently occupied, and is an important breeding area with as many as 33 breeding Pacific Coast WSPs recorded in a single season (Service unpublished data). This unit is capable of supporting 50 breeding plovers under proper management (Service

2007, Appendix B). This unit is also an important wintering area with up to 117 plovers recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features essential to the conservation of the species: wind-blown sand dunes, areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates, and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, and pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 40, Mugu Lagoon North; CA 41, Mugu Lagoon South; CA 42, San Nicolas Island :

Pursuant to section 4(a)(3) of the Act, we have exempted units CA 40, CA 41, and CA42 from critical habitat designation (see **Exemptions** section below).

CA 43, Zuma Beach, 73 ac (30 ha):

This unit is located about 8 mi (13 km) west of the City of Malibu in Los Angeles

County. It extends about 3 mi (5 km) north along the coast from the north side of Point Dume to the base of Trancas Canyon. This unit encompasses approximately 72 ac (29 ha) of Los Angeles County lands, and 1 ac (0.5 ha) of State land. This unit was occupied at the time of listing and is currently occupied. It is an important wintering area with up to 213 Pacific Coast WSPs recorded during a single season over the last 7 years (Service unpublished data; Ryan *et al.* 2010, p. 19).

This unit includes the following physical or biological features essential to the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, development, horses, and pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 44, Malibu Beach, 13 ac (5 ha):

This unit is located within the City of Malibu in Los Angeles County. It extends about 0.5 mi (1 km) north along the coast from approximately 300 ft (94 m) north of the

Malibu Pier to Malibu Point. Approximately 9 ac (4 ha) are within Malibu Lagoon State Beach. The ownership of the remaining 4 ac (1 ha) are not known; however, the State likely has jurisdiction over these lands. This unit was occupied at the time of listing and is currently occupied. It is an important wintering area with up to 67 Pacific Coast WSPs recorded during a single season over the last 7 years (Service unpublished data).

This unit includes the following physical or biological features for the conservation of the species: areas of sandy beach above and below the high-tide line with occasional surf-cast wrack supporting small invertebrates and generally barren to sparsely vegetated terrain.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from nonnative vegetation, human disturbance, and pets. Control of nonnative vegetation and enforcement of existing human-use regulations are needed to ensure the suitability of the unit. With time, we anticipate that the lower portions of this unit will be inundated by sea-level rise associated with climate change.

CA 45A, Santa Monica Beach, 48 ac (19 ha):

This subunit is located between the cities of Santa Monica and Los Angeles in Los Angeles County. It stretches roughly 1 mi (2 km) from Montana Avenue to the mouth of Santa Monica Canyon. This subunit consists of 29 ac (12 ha) of State owned

land, and 19 ac (8 ha) are owned by the City of Santa Monica. This subunit was occupied at the time of listing, is currently occupied, and annually supports a significant wintering flock of Pacific Coast WSPs (an average wintering flock of 36 from 2003 to 2010 (Service unpublished data)) in a location with high-quality breeding habitat. This location also facilitates interchange between wintering locations.

This location contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance, pets, and beach raking.

CA 45B, Dockweiler North, 34 ac (14 ha):

This subunit is located south of Ballona Creek and west of the El Segundo Dunes, and immediately west of the Los Angeles International Airport, in the City of Los Angeles, Los Angeles County. It stretches roughly 0.5 mi (0.8 km) centered at Sandpiper Street. This subunit is owned by the State of California. This subunit was occupied at the time of listing and is currently occupied. In conjunction with Subunits CA 45C and CA 45D, the subunit annually supports a significant wintering flock of Pacific Coast WSPs in a location with high quality breeding habitat (Page *in litt.* 2004) and facilitates

interchange between wintering locations.

This location contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance, pets, and beach raking.

CA 45C, Dockweiler South, 65 ac (26 ha):

This subunit is located immediately west of the Hyperion Wastewater Treatment Plant between the cities of Los Angeles and El Segundo in Los Angeles County. It stretches approximately 1 mi (1.6 km) along Vista del Mar from West Imperial Highway extending past East Grand Avenue. This subunit consists of 54 ac (22 ha) of State land and 11 ac (5 ha) of privately owned land. This subunit was occupied at the time of listing and is currently occupied. In conjunction with Subunits CA 45B and CA 45D, it annually supports a significant wintering flock of Pacific Coast WSPs in a location with high-quality breeding habitat (Page *in litt.* 2004) and facilitates interchange between wintering locations.

This location contains the physical or biological features essential to the

conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance, pets, and beach raking.

CA 45D, Hermosa State Beach, 27 ac (11 ha):

This subunit is located immediately west of the City of Hermosa Beach in Los Angeles County. This subunit stretches roughly 0.5 mi (1 km) from Eleventh Street to First Street. This subunit consists of 8 ac (3 ha) State land and 19 ac (8 ha) are privately owned. This subunit was occupied at the time of listing and is currently occupied. The unit supported an average wintering flock of 25 Pacific Coast WSPs from 2003 to 2010 (Service unpublished data). In conjunction with subunits CA 45B and CA 45C, this subunit annually supports a large and significant wintering flock of Pacific Coast WSP and facilitates interchange between wintering locations.

This location contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates.

The physical or biological features essential to the conservation of the species

may require special management considerations or protection to address the main threats from human recreational disturbance, pets, and beach raking.

CA 46A, Bolsa Chica State Beach, 93 ac (38 ha):

This subunit is located west of the Pacific Coast Highway, in the City of Huntington Beach, Orange County. It stretches roughly 2.4 mi (3.9 km) from north of the lagoon mouth channel (into Bolsa Chica Ecological Reserve) to just south of the Sunset Beach area near Warner Avenue. This subunit consists of 93 ac (38 ha) owned by the State of California. This subunit was occupied at the time of listing, is currently occupied, and supported an average wintering flock of 27 Pacific Coast WSPs from 2003 through 2010 (Service unpublished data). The subunit annually supports a significant wintering flock of Pacific Coast WSPs in a location with high-quality breeding habitat.

This location contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates. The physical or biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from recreational disturbance and beach raking.

CA 46 (Subunits B–F), Bolsa Chica Reserve, 475 ac (192 ha):

These subunits are located east of the Pacific Coast Highway, in Orange County. They consist of 475 ac (192 ha), all of which are owned by the State of California. Bolsa Chica Reserve contains significant nesting areas (which we are labeling as individual subunits B, C, D, E, and F). This location supported 47 breeding adult Pacific Coast WSP in 2009 (Knapp and Peterson 2009, p. 8). These subunits were occupied at the time of listing, are currently occupied, and annually support one of the largest breeding populations of Pacific Coast WSP in the region. The Recovery Plan for the Pacific Coast WSP states that this location contributes to the conservation goal for the region by providing a management potential of 70 breeding birds (Service 2007, Appendix B). This location also supported an average wintering flock of 14 Pacific Coast WSP from 2003 through 2010 (Service unpublished data). This reserve is an active oil field that underwent significant reconstruction and restoration between 2004 and 2006, including the addition of three new nest sites and a new ocean inlet that allows the water level to rise and fall resembling the irregular semi-diurnal tidal range of southern California's ocean waters (Knapp and Peterson 2009, p. 1).

This location contains the physical or biological features essential to the conservation of the species, including tidally influenced estuarine mud flats supporting small invertebrates, and seasonally dry ponds that provide nesting and foraging habitat for Pacific Coast WSP. The physical or biological features essential to the conservation of the species in these subunits may require special management considerations or protection to address threats from vegetation encroachment in nesting and foraging areas and predation of chicks and eggs.

CA 47, Santa Ana River Mouth, 19 ac (8 ha):

This unit is located north of the Santa Ana River mouth, immediately west of the City of Huntington Beach in Orange County. This unit consists of 19 ac (8 ha), of which 18 ac (7 ha) are owned by the State of California, and 1 ac (0.4 ha) is privately owned. This unit was not occupied at the time of listing. However, we consider this unit essential for the conservation of the species based on the fluctuating use of areas by the species as a response to habitat and resource availability. The unit is located adjacent to currently occupied areas and provides dispersal habitat between units. This unit provides habitat to support breeding plovers, and will facilitate interchange between otherwise widely separated units, and helps provide habitat within the Recovery Unit identified in the Recovery Plan (Service 2007).

This location contains habitat such as a wide sandy beach with surf-cast wrack supporting small invertebrates, and tidally influenced estuarine mud flats that provide nesting and foraging habitat for Pacific Coast WSPs. Primary threats in this unit are those associated with recreational disturbance and beach raking.

CA 48 Balboa Beach, 25 ac (10 ha):

This unit is located on the Balboa Peninsula, immediately west of the City of Newport Beach in Orange County. This unit stretches roughly 0.3 mi (0.5 km) from A Street south to G Street, including a total of 25 ac (10 ha), all of which are owned by the

City of Newport Beach. This unit was occupied at the time of listing, is currently occupied, and supported two breeding adult Pacific Coast WSPs in 2009 (P. Knapp, pers. comm. 2010) and three breeding adult Pacific Coast WSPs in 2010 (T. Ryan, *in litt.* 2010). It also supported an average wintering flock of 35 Pacific Coast WSPs from 2003 through 2010 (Service unpublished data).

This location contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance, predation of chicks and eggs, and beach raking.

CA 49, San Onofre Beach-Marine Corps Base Camp Pendleton:

Unit CA 49 has been exempted from critical habitat designation under section 4(a)(3) of the Act (see **Exemptions** section below).

CA 50 (Subunits A–C), Batiquitos Lagoon:

Unit CA 50 (66 ac (27 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 51 (Subunits A–C), San Elijo Lagoon Ecological Reserve, 15 ac (6 ha):

These subunits are located between the cities of Solana Beach and Encinitas in San Diego County. These subunits were occupied at the time of listing and are currently occupied. They consist of 15 ac (6 ha), of which 11 ac (4 ha) are owned by the State of California, and 4 ac (2 ha) are privately owned. San Elijo Lagoon includes three nest sites (which we are labeling as individual Subunits CA 51A, CA 51B, and CA 51C). The San Elijo Lagoon Restoration Working Group is planning to restore habitat at the San Elijo Lagoon Ecological Reserve, which may include nest sites for nesting sea birds and shorebirds, including Pacific Coast WSP and California least tern. Restoration and enhancement of coastal dune habitat at this site is ongoing, and the Service is currently participating in a cooperative agreement with the San Elijo Lagoon Conservancy to create suitable nesting areas for Pacific Coast WSPs, California least terns, and other shorebirds in the southwest corner of the West Basin of the lagoon. The Recovery Plan for the Pacific Coast WSP states that this location contributes significantly to the conservation goal for the region by providing a management potential of 20 breeding birds (Service 2007, Appendix B). This unit may facilitate interchange between wintering locations (see *Criteria Used to Identify Critical Habitat* section above).

These subunits contain the physical or biological features essential to the conservation of the species, including sandy beaches and tidally influenced estuarine mud

flats with tide-cast organic debris supporting small invertebrates. Restoration of degraded habitat within these subunits will improve the habitat.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance, vegetation encroachment in the intertidal zone, and predation of chicks and eggs.

CA 52A, San Dieguito Lagoon, 4 ac (2 ha):

Subunit CA 52A is located at the west end of San Dieguito River Park within the city of Del Mar in San Diego County. This subunit was occupied at the time of listing, is currently occupied, and consists of 4 ac (1 ha), all of which are privately owned.

This subunit is a nest site that was created for nesting seabirds and shorebirds including Pacific Coast WSP and California least tern. This subunit also facilitates interchange between wintering locations. The Recovery Plan for the Pacific Coast WSP states that San Dieguito Lagoon contributes significantly to the conservation goal for the region by providing a management potential of 20 breeding birds (Service 2007, Appendix B). Additionally, restoration of this site occurred in 2009, improving areas used by breeding and wintering shorebirds. Use of one nesting site by a pair of plovers was reported in 2010 (Foster, pers. comm. 2010b). Additional improvements to the nest sites are expected in the future.

This subunit contains the physical or biological features essential to the conservation of the species, including wide sandy beaches and tidally influenced estuarine mud flats with tide-cast organic debris supporting small invertebrates.

The physical or biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from human recreational disturbance, vegetation encroachment in the intertidal zone, and predation of chicks and eggs.

CA 52 (Subunits B–C), San Dieguito Lagoon:

Subunits CA 52B (3 ac (1 ha)) and CA 52C (4 ac (2 ha)) have been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 53, Los Penasquitos Lagoon:

Unit CA 53 (32 ac (13 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 54A, Fiesta Island:

Subunit CA 54A (2 ac (1 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 54B, Mariner's Point:

Subunit CA 54B (7 ac (3 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 54C, South Mission Beach:

Subunit CA 54C (38 ac (15 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 54D, San Diego River Channel:

Subunit CA 54D (51 ac (21 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 55A, Naval Air Station North Island:

Subunit CA 55A has been exempted from critical habitat designation under section 4(a)(3) of the Act (see **Exemptions** section below).

CA 55B, Coronado Beach, 74 ac (30 ha):

This subunit is located immediately west of the City of Coronado in San Diego County. This subunit stretches roughly 0.6 mi (0.96 km) from the boundary with Naval Air Station North Island (NASNI) to the south end of the natural sand dunes at Coronado City Beach. This subunit includes a total of 74 ac (30 ha) owned by the State of California. This subunit was occupied at the time of listing, is currently occupied, and is adjacent to the sizable Pacific Coast WSP population at NASNI, which contained an average wintering flock of 69 Pacific Coast WSPs from 2003 to 2010 (Service unpublished data). Additionally, biologists recorded 17 breeding adults at NASNI during 2009 surveys (Service unpublished data). The Recovery Plan for the Pacific Coast WSP states that this location (in conjunction with adjacent military lands) contributes significantly to the conservation goal for the region by providing a management potential of 20 breeding birds (Service 2007, Appendix B). This unit also facilitates interchange between wintering locations.

This subunit contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as wind-blown sand in dune systems immediately inland of the active beach face.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats

from human recreational disturbance and beach raking.

CA 55C, Silver Strand Beach and CA 55D, Delta Beach:

Subunits CA 55C and CA 55D have been exempted from critical habitat designation under section 4(a)(3) of the Act (see **Exemptions** below).

CA 55E, Sweetwater Marsh National Wildlife Refuge and D Street Fill, 79 ac (32 ha):

Lands owned and managed by the Port of San Diego under the San Diego Bay Natural Resources Plan within subunit CA 55E (53 ac (21 ha)) have been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below). Federal lands (79 ac (32 ha)) within the subunit that are owned and managed by the Service (Sweetwater Marsh National Wildlife Refuge) are not excluded from critical habitat.

This subunit is located on the east side of San Diego Bay in the City of Chula Vista in San Diego County. This subunit consists of approximately 79 ac (32 ha) of which all are owned by the Service. This subunit was occupied at the time of listing, is currently occupied, and supported nesting Pacific Coast WSPs in 2000 (R. Patton, pers. comm. 2010), and two adult Pacific Coast WSPs in 2009 (Service unpublished data). The Recovery Plan for the Pacific Coast WSP states that this location contributes significantly to the conservation goal for the region by providing a management potential

of 25 breeding birds (Service 2007, Appendix B). Additionally, this subunit annually supports a large and significant wintering flock of Pacific Coast WSPs and facilitates interchange between wintering locations.

This subunit contains the physical or biological features essential to the conservation of the species, including sandy beaches above and below mean high-tide line and tidally influenced estuarine mud flats that provide nesting and foraging habitat for Pacific Coast WSPs.

The physical or biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address threats from vegetation encroachment in the intertidal zone, and predation of chicks and eggs.

CA 55F, Silver Strand State Beach, 82 ac (33 ha):

This subunit is located immediately north of the City of Imperial Beach, in the City of Coronado in San Diego County. This subunit consists of 82 ac (33 ha), of which approximately 78 ac (31 ha) are owned by the State of California, and the ownership of 4 ac (1 ha) are unknown, but may also be under the State's jurisdiction. This subunit was occupied at the time of listing and is currently occupied. The subunit stretches roughly 1.5 mi (2.4 km) west of Silver Strand Boulevard, and is centered roughly at Coronado Cays Park. This subunit, in conjunction with adjacent lands at Naval Amphibious Base

Coronado, supported at least 10 breeding adults in 2009 (Service unpublished data) and 8 breeding adults in 2010 (Ryan, *in litt.* 2010). The Recovery Plan for the Pacific Coast WSP states that this location contributes significantly to the conservation goal for the region by providing a management potential of 65 breeding birds (Service 2007, Appendix B). This subunit contained an average wintering flock of 13 Pacific Coast WSPs from 2003 to 2010 (Service unpublished data). This subunit also facilitates interchange between wintering locations.

This subunit contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surf-cast wrack supporting small invertebrates, as well as wind-blown sand in dune systems immediately inland of the active beach face.

The physical or biological features essential to the conservation of the species may require special management considerations or protection to address the main threats from human recreational disturbance and predation of chicks and eggs.

CA 55G, Chula Vista Wildlife Reserve:

Subunit CA 55G (10 ac (4 ha)) has been excluded from critical habitat designation under section 4(b)(2) of the Act (see **Exclusions** section below).

CA 55H, Naval Radio Receiving Facility:

Subunit CA 55H has been exempted from critical habitat designation under section 4(a)(3) of the Act (see **Exemptions** section below).

CA 55I, San Diego National Wildlife Refuge, South Bay Unit, 5 ac (2 ha):

This subunit is located at the southernmost end of San Diego Bay in a location that is operated by Western Salt Works as salt evaporation ponds. This subunit is immediately north of the City of Imperial Beach, in the City of San Diego in San Diego County. This subunit consists of 5 ac (2 ha), all of which are owned by the Service. This subunit was occupied at the time of listing, is currently occupied, and supported at least three breeding adults in 2009 (Collins, *in litt.* 2010), and seven breeding adults in 2010 (Ryan, *in litt.* 2010). The Recovery Plan for the Pacific Coast WSP states that this location contributes significantly to the conservation goal for the region by providing a management potential of 30 breeding birds (Service 2007, Appendix B).

The subunit contains the physical or biological features essential to the conservation of the species, including sparsely vegetated areas on artificial salt flats and adjoining dikes, as well as tidally influenced estuarine mud flats with tide-cast organic debris supporting small invertebrates for foraging.

The physical or biological features essential to the conservation of the species in this subunit may require special management considerations or protection to address

threats from egg and chick predation.

CA 55J, Tijuana Estuary and Border Field State Park, 150 ac (61 ha):

This subunit is located in the City of Imperial Beach in San Diego County. This subunit stretches roughly 2 mi (3.2 km) from the end of Seacoast Drive to the United States/Mexico border, extending across both the Tijuana Slough National Wildlife Refuge and Border Field State Park. This subunit consists of 150 ac (61 ha), of which 71 ac (29 ha) are owned by the Service and 79 ac (32 ha) are owned by the State of California. This subunit was occupied at the time of listing, is currently occupied, and supported at least 10 adult breeding Pacific Coast WSPs in 2009 (B. Collins, *in litt.* 2010), and 19 breeding adults in 2010 (Ryan, *in litt.* 2010). This location also supported an average wintering flock of 54 Pacific Coast WSPs from 2003 to 2010 (Service unpublished data). The Recovery Plan for the Pacific Coast WSP states that this location contributes significantly to the conservation goal for the region by providing a management potential of 40 breeding birds (Service 2007, Appendix B).

This subunit contains the physical or biological features essential to the conservation of the species, including a wide sandy beach with occasional surfcast wrack supporting small invertebrates, as well as tidally influenced estuarine mud flats with tide-cast organic debris supporting small invertebrates for foraging.

The physical or biological features essential to the conservation of the species in

this subunit may require special management considerations or protection to address threats from human recreational disturbance and predation of chicks and eggs.

Effects of Critical Habitat Designation

Section 7 Consultation

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

Decisions by the 5th and 9th Circuit Courts of Appeal have invalidated our regulatory definition of “destruction or adverse modification” (50 CFR 402.02) (see *Gifford Pinchot Task Force v. U.S. Fish and Wildlife Service*, 378 F.3d 1059 (9th Cir. 2004) and *Sierra Club v. U.S. Fish and Wildlife Service et al.*, 245 F.3d 434, 442 (5th Cir. 2001)), and we do not rely on this regulatory definition when analyzing whether an action is likely to destroy or adversely modify critical habitat. Under the statutory provisions of the Act, we determine destruction or adverse modification on the basis of whether, with

implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, tribal, local, or private lands that require a Federal permit (such as a permit from the U.S. Army Corps of Engineers under section 404 of the Clean Water Act (33 U.S.C. 1251 et seq.) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat, and actions on State, tribal, local, or private lands that are not federally funded or authorized, do not require section 7 consultation.

As a result of section 7 consultation, we document compliance with the requirements of section 7(a)(2) of the Act through our issuance of:

- (1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or
- (2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify

critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 require Federal agencies to reinitiate consultation on previously reviewed actions in instances where we have listed a new species or subsequently designated critical habitat that may be affected, and the Federal agency has retained discretionary involvement or control over the action (or the agency’s discretionary involvement or control is authorized by law). Consequently, Federal agencies sometimes may need to request reinitiation of consultation with us on actions for which formal consultation has been completed, if those actions with discretionary

involvement or control may affect subsequently listed species or designated critical habitat.

Application of the “Adverse Modification” Standard

The key factor related to the adverse modification determination is whether, with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species. Activities that may destroy or adversely modify critical habitat are those that alter the physical and biological features to an extent that appreciably reduces the conservation value of critical habitat for the Pacific Coast WSP. As discussed above, the role of critical habitat is to support life-history needs of the species and to provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may destroy or adversely modify such habitat, or that may be affected by such designation.

Activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result consultation for the Pacific Coast WSP. These activities include, but are not limited to:

(1) Actions and management efforts affecting Pacific Coast WSP on Federal lands, such as refuges, national seashores, parks, and wildlife reserves. Such activities

may include clearing and raking of tidal debris (seaweed, driftwood) from beaches, causing a loss in cover and forage; high levels of visitor use, which can disturb and disrupt normal behavior; restoration efforts, which can temporarily affect Pacific Coast WSP's use of an area; and utility corridors that require maintenance, which can lead to disturbance of Pacific Coast WSPs;

(2) Dredging and dredge spoil placement that permanently removes the physical or biological features to the extent that Pacific Coast WSPs are affected for the foreseeable future;

(3) Construction and maintenance of roads, walkways, marinas, access points, bridges, culverts, and other structures that interfere with Pacific Coast WSP nesting, breeding, or foraging or that result in increases in predation;

(4) Storm water and wastewater discharge from communities, which could impact invertebrate abundance, on which Pacific Coast WSPs rely for food; and

(5) Flood control actions that change the physical or biological features to the extent that the habitat no longer contributes to the conservation of the species.

Note that the scale of these activities is a crucial factor in determining whether, in any instance, they would directly or indirectly alter critical habitat to the extent that the

value of the critical habitat would be appreciably diminished in providing for the physical or biological features essential to the conservation of the Pacific Coast WSP.

We consider all of the revised final critical habitat units and subunits to contain features essential to or for the conservation of the Pacific Coast WSP. To ensure that their actions do not jeopardize the continued existence of the Pacific Coast WSP, Federal agencies already consult with us on activities in areas currently occupied by the Pacific Coast WSP, or in unoccupied areas if the species may be affected by their actions.

Exemptions

Application of Section 4(a)(3) of the Act

The Sikes Act Improvement Act of 1997 (Sikes Act) (16 U.S.C. 670a) required each military installation that includes land and water suitable for the conservation and management of natural resources to complete an integrated natural resources management plan (INRMP) by November 17, 2001. An INRMP integrates implementation of the military mission of the installation with stewardship of the natural resources found on the base. Each INRMP includes:

- (1) An assessment of the ecological needs on the installation, including the need to provide for the conservation of listed species;
- (2) A statement of goals and priorities;
- (3) A detailed description of management actions to be implemented to provide

for these ecological needs; and

(4) A monitoring and adaptive management plan.

Among other things, each INRMP must, to the extent appropriate and applicable, provide for fish and wildlife management; fish and wildlife habitat enhancement or modification; wetland protection, enhancement, and restoration where necessary to support fish and wildlife; and enforcement of applicable natural resource laws.

The National Defense Authorization Act for Fiscal Year 2004 (Pub. L. 108-136) amended the Act to limit areas eligible for designation as critical habitat. Specifically, section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) now provides: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense, or designated for its use, that are subject to an integrated natural resources management plan prepared under section 101 of the Sikes Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.”

We consult with the military on the development and implementation of INRMPs for installations with federally listed species. We analyzed INRMPs developed by military installations located within the range of the critical habitat designation for the Pacific Coast WSP to determine if units covered by these INRMPs are exempt under section 4(a)(3) of the Act. The following areas are Department of Defense lands with completed, Service-approved INRMPs within the revised critical habitat designation.

Approved Integrated Natural Resources Management Plans

Naval Support Activity Monterey, CA 22, 8 ac (3 ha):

The Department of the Navy, Naval Support Activity (NSA) Monterey provides primary support to the Naval Postgraduate School, Fleet Numerical Meteorology and Oceanography Center, Navy Research Lab and more than 15 additional tenant commands. Naval Support Activity Monterey supports over 160 buildings which are located on more than 626 ac (253 ha) of DOD lands. The Naval Postgraduate School is the largest producer of advanced graduate degrees for DOD and graduates thousands every year from all services and from over 50 countries. The Fleet Numerical Meteorology and Oceanography Center provides the highest quality, most relevant, and timely worldwide Meteorology and Oceanography support to U.S. and coalition forces from their Operations Center in Monterey, California. The Navy Research Lab conducts scientific and weather modeling as well as atmospheric and aerosol studies.

The NSA Monterey INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to ensure that natural resources are managed in support of the NSA Monterey's military command mission and that all activities are consistent with Federal stewardship requirements. The NSA Monterey INRMP was completed in 2001. An addendum to the 2001 INRMP, addressing conservation of the Pacific Coast WSP, was submitted to the Service in March 2012 and was approved and signed by the Service in May 2012. The

INRMP is NSA Monterey's adaptive plan for managing natural resources to support and be consistent with the military mission, while protecting and enhancing the biological integrity of lands under its use. Naval Support Activity Monterey is committed to an ecosystem management approach for its natural resources program by integrating all components of natural resource management into a comprehensive and coordinated effort. An integrated approach to ecosystem management will help protect the biological diversity found at NSA Monterey.

The INRMP identifies the goal of contributing to the recovery of the Pacific Coast WSP through development of cooperative, ecosystem management-based strategies. The INRMP identifies the following management and protective measures to achieve this goal:

- (1) Protect and maintain natural coastal processes that perpetuate high-quality breeding habitat including measures such as:
 - (2) Ensure beach areas are clean of litter and contaminants;
 - (3) Improve signage mandating dogs be leashed at all times;
 - (4) Develop and maintain a feral animal predator management program;
 - (5) Minimize activities which can affect invertebrate populations that shorebirds forage on, such as routine removal of tidal wrack;
 - (6) Discourage human foot traffic from suitable nesting areas with fencing and educational signage;
 - (7) Eliminate incompatible military operations on beach during nesting season;
 - (8) Actively communicate management strategies to local community;

- (9) Enhance remnant dune areas as potential nest sites;
- (10) Identify opportunities to use suitable dredge or other materials for expansion of beach areas to create improved nesting substrate;
- (11) Maintain native plant coverage on dunes and control invasive weeds on dunes and beach;
- (12) Conduct monitoring in support of management objective;
- (13) Meet with stakeholders annually to oversee implementation and prioritize projects;
- (14) Monitor Pacific Coast WSP population at least annually; and
- (15) Regularly monitor dune and beach area and identify conflicts for immediate actions and long-term projects.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the 2001 INRMP and the 2012 Addendum to the INRMP for NSA Monterey and that the conservation efforts identified in the INRMP have and will provide a benefit to the Pacific Coast WSP and features essential to its conservation, and will benefit Pacific Coast WSPs occurring in habitats within or adjacent to NSA Monterey. Therefore, lands within this installation (approximately 8 ac (3 ha) of Unit CA 22) are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 8 ac (3 ha) of habitat for the Pacific Coast WSP in this revised final critical habitat designation because of this exemption.

Vandenberg Air Force Base, CA 32 and CA 33, 1,135 ac (460 ha):

VAFB is headquarters for the 30th Space Wing, the Air Force's Space Command unit that operates VAFB and the Western Test Range/Pacific Missile Range. VAFB operates as an aerospace center supporting west coast launch activities for the Air Force, Department of Defense, National Aeronautics and Space Administration, and commercial contractors. The three primary operational missions of VAFB are to launch, place, and track satellites in near-polar orbit; to test and evaluate the intercontinental ballistic missile systems; and to support aircraft operations in the western range. VAFB lies on the south-central California coast, approximately 275 mi (442 km) south of San Francisco, 140 mi (225 km) northwest of Los Angeles, and 55 mi (88 km) northwest of Santa Barbara. The 99,100-ac (40,104-ha) base extends along approximately 42 mi (67 km) of Santa Barbara County coast, and varies in width from 5 to 15 mi (8 to 24 km).

The VAFB INRMP was prepared to provide strategic direction to ecosystem and natural resources management on VAFB. The long-term goal of the INRMP is to integrate all management activities in a manner that sustains, promotes, and restores the health and integrity of VAFB ecosystems using an adaptive management approach. The INRMP was designed to: (1) Summarize existing management plans and natural resources literature pertaining to VAFB; (2) identify and analyze management goals in existing plans; (3) integrate the management goals and objectives of individual plans; (4) support base compliance with applicable regulatory requirements; (5) support the

integration of natural resource stewardship with the Air Force mission; and (6) provide direction for monitoring strategies.

VAFB completed an INRMP in 2011, which benefits western snowy plover by: (1) Implementing restrictions on recreational beach access during the nesting season, which are evaluated each year for their effectiveness in protecting snowy plovers; (2) prohibiting recreational off-road vehicle activity on western snowy plover beaches at any time except when essential to support the VAFB mission or in an emergency; (3) training VAFB personnel to operate ATVs to avoid impacts to western snowy plovers and their habitat; (4) using horse and foot patrols when possible on base beaches; (5) enforcing leash laws throughout VAFB year-round; (6) prohibiting all pets on western snowy plover nesting beaches between March 1 and September 30 each year; (7) implementing a predator management plan that includes ecologically sound approaches to reducing predation of western snowy plover nests and chicks; (8) cleaning base beaches between October 1 and February 28 each year under the “Adopt-a-Beach Program” and implementing program-specific monitoring of western snowy plovers, to determine impacts from launches and other Air Force activities; (9) restricting aircraft overflight to a minimum of 500-foot altitude above western snowy plover nesting beaches; and (10) establishing flight patterns to minimize aircraft presence over these beaches (VAFB 2011, Tab D, p. 18-20). Furthermore, VAFB’s environmental staff reviews projects and enforces existing regulations and orders that, through their implementation, avoid and minimize impacts to natural resources, including the western snowy plover and its habitat.

Habitat features essential to the conservation of the western snowy plover exist on VAFB, and activities occurring on VAFB are currently being conducted in a manner that minimizes impacts to western snowy plover habitat. This military installation has a Secretarial-approved INRMP that provides a benefit to the western snowy plover, and VAFB has committed to work closely with the Service and the CDFG to continually refine their existing INRMP as part of the Sikes Act's INRMP review process. Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that conservation efforts identified in the 2011 INRMP for VAFB provide a benefit to the western snowy plover and its habitat. This includes habitat located on Vandenberg North (CA 32) and South (CA 33) beaches. Therefore, lands subject to the INRMP for VAFB, which includes the lands leased from the Department of Defense by other parties, are exempt from critical habitat designation under section 4(a)(3)(B) of the Act, and we are not including approximately 1,135 ac (460 ha) of habitat in this revised critical habitat designation because of this exemption.

Naval Base Ventura County Point Mugu, CA 40 and CA 41, 208 ac (84 ha):

The Department of the Navy, Naval Base Ventura County, manages two facilities in Ventura County, California: Point Mugu and San Nicolas Island. Naval Base Ventura County, Point Mugu (NBVC, Point Mugu) was established in 1949 as the Naval Air Weapons Station to support a new U.S. Naval Air Missile Test Center, which provided material and service support, including military personnel administration, air traffic

control, and flight line functions. The NBVC, Point Mugu occupies approximately 4,490 ac (1,817 ha) of land on the coast of southern California, Ventura County. Currently, the installation is used for target drone launches, aircraft operations, and beach missile launch operations, and is responsible for maintenance of the roads and perimeter fence, utilities maintenance, pest management, recreation, and natural resource management.

The NBVC, Point Mugu INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to ensure that natural resources are managed in support of the Naval Base Ventura County's military command mission and that all activities are consistent with Federal stewardship requirements. The NBVC, Point Mugu INRMP was completed in 2002, and renewed and approved by the Service in 2008. The INRMP is Naval Base Ventura County's adaptive plan for managing natural resources to support and be consistent with the military mission, while protecting and enhancing the biological integrity of lands under its use (U.S. Navy 2002, p. ES-3). Naval Base Ventura County is committed to an ecosystem management approach for its natural resources program by integrating all components of natural resource management into a comprehensive and coordinated effort. An integrated approach to ecosystem management will help protect the biological diversity found at NBVC, Point Mugu.

The INRMP identifies the following management and protective measure goals for the Pacific Coast WSP:

- (1) Monitor and manage breeding habitat of Pacific Coast WSPs;

(2) Monitor and manage wintering and migration areas to maximize Pacific Coast WSP population survival;

(3) Develop mechanisms for long-term management and protection of Pacific Coast WSPs and their breeding and wintering habitat;

(4) Undertake scientific investigations that facilitate recovery efforts;

(5) Undertake public information and education programs for Pacific Coast WSPs;

(6) Continue measures in place for Pacific Coast WSP protection, including beach closures;

(7) Protect and maintain natural coastal processes that perpetuate high-quality breeding habitat;

(8) Keep Pacific Coast WSP management areas closed to all pets, leashed or not, with the exception of NBVC security dogs on official duty (*e.g.*, apprehending a suspect);

(9) Monitor habitat to maintain the nesting substrates necessary for Pacific Coast WSP breeding success;

(10) Identify factors that limit the quality of wintering and breeding habitat;

(11) Clean and restore the eastern arm of Mugu Lagoon to sandy beach;

(12) Improve methods of monitoring Pacific Coast WSPs, such as color banding;

and

(13) Develop and implement public information and education programs on Pacific Coast WSPs and recovery efforts at the proposed Mugu Lagoon Visitor Education Center.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the 2008 INRMP for NBVC, Point Mugu and that the conservation efforts identified in the INRMP have and will provide a benefit to the Pacific Coast WSP and features essential to its conservation, and will benefit Pacific Coast WSPs occurring in habitats within or adjacent to NBVC, Point Mugu. Therefore, lands within this installation (Units CA 40 and CA 41) are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 208 ac (84 ha) of habitat in this revised final critical habitat designation because of this exemption.

Department of the Navy, Naval Base Ventura County, San Nicolas Island (CA 42), 321 ac (130 ha):

San Nicolas Island is under the jurisdiction of Department of the Navy, Naval Base Ventura County. The 14,230-ac (5,759-ha) San Nicolas Island is located approximately 65 mi (105 km) south of NBVC, Point Mugu. Naval facilities on San Nicolas Island include a 10,000-ft (3,048-m) concrete and asphalt runway, radar tracking instrumentation, electro-optical devices, telemetry, communications equipment, and missile and target launch areas, as well as personnel support. Currently, the island is used as the management launch platform for short- and medium-range missile testing, and an observation facility for missile testing. Primarily, San Nicolas Island's mission is to support the primary research, design, development, testing, and evaluation of air weapons and associated aircraft systems into anti-surface and anti-air warfare aircraft.

The San Nicolas Island INRMP (U.S. Navy 2005, pp. 1–129) is a planning document that guides the management and conservation of natural resources under the Navy Base Ventura County's control. The INRMP was prepared to ensure that natural resources are managed in support of the Naval Base Ventura County's military command mission and that all activities are consistent with Federal stewardship requirements. The San Nicolas Island INRMP was completed and approved by the Service in 2003, and renewed in 2005. The San Nicolas Island INRMP is Naval Base Ventura County's adaptive plan for managing natural resources to support and be consistent with the military mission, while protecting and enhancing the biological integrity of lands under its use (U.S. Navy 2005, p. 5). Naval Base Ventura County is committed to an ecosystem management approach for its natural resources program by integrating all components of natural resource management into a comprehensive and coordinated effort. An integrated approach to ecosystem management will help protect the biological diversity found at San Nicolas Island.

The San Nicolas Island INRMP identifies the following management and protective measure goals for the Pacific Coast WSP:

- (1) Monitor Pacific Coast WSPs' nests during missile launches, barge landings, and other activities that may disturb nesting behaviors;
- (2) Close Pacific Coast WSP nesting areas to recreational activity during the breeding season (March through September);
- (3) Monitor the effects of Navy activities on Pacific Coast WSPs by conducting

island-wide Pacific Coast WSP censuses twice annually, once during the breeding season and once during the winter season;

(4) Educate island personnel regarding protected species regulations and responsibilities;

(5) Maintain signs around breeding sites to alert personnel of closures;

(6) Conduct site-specific Pacific Coast WSP surveys in potential or known breeding habitat prior to disturbance activities;

(7) Remove unnecessary structures in Pacific Coast WSP nesting areas and attach avian excluders to essential structures, if feasible;

(8) Conduct amphibious training exercises on beaches not harboring nesting Pacific Coast WSPs;

(9) Continue to implement a feral cat control/removal program;

(10) Develop and maintain a computer database for storing information on locations of nesting sites, incidental sightings and size and results of surveys for resource management purposes;

(11) Continue to participate with recovery planning and other efforts to help establish stable Pacific Coast WSP populations; and

(12) Support research to explore the effects of increasing pinniped (seal, sea lion) populations on nesting success of Pacific Coast WSPs.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the 2005 INRMP for San Nicolas Island and that the conservation efforts identified in the INRMP have and

will provide a benefit to the Pacific Coast WSP and features essential to its conservation, and will benefit Pacific Coast WSPs occurring in habitats within or adjacent to NBVC, San Nicolas Island. Therefore, lands within this installation (Unit CA 42) are exempt from critical habitat designation under section 4(a)(3)(B) of the Act. We are not including approximately 321 ac (130 ha) of habitat in this revised final critical habitat designation because of this exemption.

Marine Corps Base (MCB) Camp Pendleton (CA 49), 441 ac (179 ha):

Marine Corps Base (MCB) Camp Pendleton is the Marine Corps' premier amphibious training installation and it is the only west coast amphibious assault training center. The installation has been conducting air, sea, and ground assault training since World War II. MCB Camp Pendleton occupies over 125,000 ac (50,586 ha) of coastal southern California in the northwest corner of San Diego County. Aside from nearly 10,000 ac (4,047 ha) that is developed, most of the installation is largely undeveloped land that is used for training. MCB Camp Pendleton is situated between two major metropolitan areas: the City of Los Angeles that is 82 mi (132 km) to the north, and the City of San Diego that is 38 mi (61 km) to the south. MCB Camp Pendleton is located north of the City of Oceanside, southeast of the City of San Clemente, and adjacent to the western side of the unincorporated community of Fallbrook, San Diego County, California. Aside from a portion of the installation's border that is shared with the Cleveland National Forest's San Mateo Wilderness Area and Fallbrook Naval Weapons Station, surrounding land use includes urban development, rural residential development,

and farming and ranching. The largest single leaseholder on the installation is CDPR, which possesses a 50-year real estate lease granted on September 1, 1971, for 2,000 ac (809 ha) that encompasses San Onofre State Beach.

The MCB Camp Pendleton INRMP is a planning document that guides the management and conservation of natural resources under the installation's control. The INRMP was prepared to assist installation staff and users in their efforts to conserve and rehabilitate natural resources consistent with the use of MCB Camp Pendleton to train Marines and set the agenda for managing natural resources on MCB Camp Pendleton. Marine Corps Base Camp Pendleton completed its INRMP in 2001, followed by a revised and updated version in 2007, to address conservation and management recommendations within the scope of the installation's military mission, including conservation measures for Pacific Coast WSP (MCB Camp Pendleton 2007, Appendix F, Section F.23, pp. F85–F89). The Service provided concurrence in 2001 and 2007 for the respective INRMPs. Additionally, CDPR is required to conduct its natural resources management consistent with the philosophies and supportive of the objectives in the revised 2007 INRMP (MCB Camp Pendleton 2007, Chapter 2, p. 31).

The Pacific Coast WSP and its habitat are provided protection and management by the Estuarine and Beach Conservation Plan (MCB Camp Pendleton 2007, Appendix B, pp. B-1 – B-20), which was addressed through the section 7 consultation process with a biological opinion issued by the Service on October 30, 1995 (Service 1995, Biological Opinion 1-6-95-F02), and is now implemented under the 2007 INRMP. Base-wide

protection measures for avoidance and minimization of impacts to Pacific Coast WSP and its habitat, especially during the breeding season, are provided in both the conservation plan and Base Order P3500.1M. The base-wide protection measures for Pacific Coast WSP include, but are not limited to:

- (1) Minimize reduction or loss of upland buffers surrounding coastal wetlands;
- (2) Restore the dune system in the vicinity of the Santa Margarita Estuary following the guidance developed by The Nature Conservancy;
- (3) Maintain integrity of listed species' habitat; and
- (4) Promote growth of current population of Pacific Coast WSPs (MCB Camp Pendleton 2007, Appendix B, pp. B5–B7).

Annual management and protection measures for Pacific Coast WSPs identified in Appendix F of the INRMP include, but are not limited to:

- (1) Installation of sign postings describing the sensitive nature of the breeding area/season;
- (2) Installation of permanent/temporary fencing that directs military training away from sensitive nesting and foraging areas;
- (3) Beach habitat enhancement (nonnative vegetation control and sand mobilization);
- (4) Ant control (ants can cause incubating adults to abandon a nest, and can contribute towards chick mortality); and
- (5) Focused predator control (MCB Camp Pendleton 2007, Appendix F, p. F89).

Current environmental training regulations and restrictions are provided to all military personnel to maintain compliance with the terms of the INRMP. Training regulations guide activities to protect endangered and threatened species on the installation, including Pacific Coast WSP and its habitat. Specific conservation measures, outlined in the Instructions for Military Training Activities section of the Estuarine and Beach Conservation Plan, are applied to Pacific Coast WSP and its habitat (MCB Camp Pendleton 2007, p. B-13). These include:

(1) Military activities are kept to a minimum within the Santa Margarita Management Zone (*i.e.*, the area on the base where the majority of nesting sites occur) and any nesting site outside the traditionally fenced nesting areas during the breeding/nesting season (1 March – 31 August) for the Pacific Coast WSP. A buffer distance of 984 ft (300 m) away from fenced or posted nesting areas must be adhered to for all activities involving smoke, pyrotechnics, loud noises, blowing sand, and large groupings of personnel (14 or more). Aircraft are not authorized to land within 984 ft (300 m) of fenced nesting areas on Blue Beach or White Beach and are required to maintain an altitude of 300 ft (91 m) Above Ground Level (AGL) or more above nesting areas.

(2) Recreational activities within the Santa Margarita Management Zone and posted nest locations during the breeding season are to be kept to a minimum, and camping at Cocklebur Canyon Beach is prohibited.

(3) Foot traffic within the Santa Margarita Management Zone is prohibited within 150 ft (46 m) of posted nesting areas during the breeding season.

(4) A 300-ft (91-m) buffer from posted nesting areas is required for surf fishermen, and no live baitfish or amphibians are allowed for fishing activities.

Additionally, MCB Camp Pendleton Environmental Security staff review projects and enforce existing regulations and orders that, through their implementation under National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) requirements, avoid and minimize impacts to natural resources, including the Pacific Coast WSP and its habitat. MCB Camp Pendleton also provides training to personnel on environmental awareness for sensitive resources on the base, including the Pacific Coast WSP and its habitat. As a result of these regulations and restrictions, activities occurring on MCB Camp Pendleton are currently conducted in a manner that minimizes impacts to Pacific Coast WSPs and their habitat.

MCB Camp Pendleton's INRMP also benefits Pacific Coast WSP through ongoing monitoring and research efforts. To assess the effectiveness of MCB Camp Pendleton's Estuarine and Beach Conservation Plan, biennial monitoring is conducted to determine number of pairs, hatching success, and reproductive success (MCB Camp Pendleton 2007, Appendix B, p. B12). Annual monitoring of nests is conducted to track Pacific Coast WSP population trends (MCB Camp Pendleton 2007, Appendix F, p. F89). Data are provided to all necessary personnel through MCB Camp Pendleton's GIS database on sensitive resources and MCB Camp Pendleton's published resource atlas. Moreover, CDPR is required to conduct its natural resources management consistent with the philosophies and supportive of the objectives of the INRMP (MCB Camp Pendleton

2007, p. 2-30).

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the MCB Camp Pendleton INRMP and that conservation efforts identified in the 2007 INRMP do and will continue to provide a benefit to Pacific Coast WSP and features essential to its conservation, and will benefit Pacific Coast WSPs occurring in habitats within or adjacent to MCB Camp Pendleton. This includes habitat located in the following areas: San Onofre Beach, Aliso/French Creek Mouth, and Santa Margarita River Estuary (names of areas follow those used in the draft recovery plan (Service 2001, Appendix B, p. B-16)). Therefore, lands within this installation are exempt from critical habitat designation under section 4(a)(3) of the Act. We are not including approximately 441 ac (179 ha) of habitat in this revised final critical habitat designation because of this exemption.

Naval Base Coronado, Naval Air Station (CA 55A, CA 55C, CA 55D, and CA 55H), 734 ac (297 ha):

Naval Base Coronado includes eight military facilities in San Diego County, California. Three of these facilities (Naval Air Station North Island (CA 55A); Naval Amphibious Base Coronado (CA 55C, and CA 55D); and Naval Radio Receiving Facility (CA 55H)) include beach habitat that supports Pacific Coast WSPs. For planning and description purposes regarding these beaches and the military training that occurs here,

the U.S. Navy describes these areas as:

- (1) Naval Air Station North Island (NAS North Island),
- (2) Naval Amphibious Base Coronado or Silver Strand Training Complex–North (SSTC-North), and
- (3) Naval Radio Receiving Facility or Silver Strand Training Complex–South (SSTC-South).

NAS North Island is located north of the City of Coronado and encompasses 2,803 ac (1134 ha), of which approximately 95 ac (39 ha) is southern foredune/beach habitat. SSTC-North is located south of the City of Coronado and encompasses roughly 1,000 ac (405 ha), of which approximately 257 ac (104 ha) are beach-front habitat leased from CDPR for amphibious military training activities. SSTC-North, including the San Diego Bay-front beach referred to as Delta Beach, supports approximately 278 ac (113 ha) of southern foredune/beach habitat. SSTC-South is located north of the City of Imperial Beach, and encompasses 450 ac (182 ha), of which approximately 78 ac (32 ha) is southern foredune/beach habitat.

The U.S. Navy completed an INRMP in 2002 to provide a viable framework for the management of natural resources on lands controlled by for Naval Base Coronado. This INRMP was approved by the Service. The U.S. Navy continues to implement the completed 2002 INRMP as a revision is being drafted. The INRMP identifies conservation and management recommendations within the scope of the installation's military mission, including conservation measures for Pacific Coast WSP and its habitat

(Naval Base Coronado 2002, Section 3, pp. 81–83). The management strategy outlines actions that would contribute to the recovery of Pacific Coast WSP through development of cooperative, ecosystem management-based strategies (Naval Base Coronado 2002, Section 4, pp. 56–58).

The INRMP revision will reflect the management changes driven by the U.S. Navy's need for additional beach training. The U.S. Navy will continue to implement the 2002 INRMP, subject to modified management strategies identified in the 2010 Silver Strand Training Area Biological Opinion (BO), until completion of a revised INRMP. The revised INRMP will include the management strategy identified in the 2010 Silver Strand Training BO. The 2002 INRMP identifies conservation and management recommendations within the scope of the installation's military mission, including conservation measures for Pacific Coast WSP and its habitat (Naval Base Coronado 2002, Section 3, pp. 81–83). The management strategy outlines actions that would contribute to the recovery of Pacific Coast WSP through development of cooperative, ecosystem management-based strategies (Naval Base Coronado 2002, Section 4, pp. 56–58). Management actions that will benefit the Pacific Coast WSP to be implemented by the Navy on the U.S. Navy's Silver Strand Training Complex Operations, Naval Base, Coronado, in accordance with the 2002 INRMP as modified by the 2010 SSTC BO (08B0503-09F0517) include:

- (1) Minimize the potential for take of nests and chicks at SSTC-N and SSTC-S Beaches during the breeding season;
- (2) Monitor training activities to ascertain the impact on Pacific Coast WSP

distribution and report any observed incidental take to the Service annually;

(3) Modify the beach to create hummocks to deter plovers from nesting in intensively used beach lanes;

(4) Schedule efforts to avoid beach lanes with higher nest numbers;

(5) Study the effects of military working dogs on plovers to develop additional conservation measures, if necessary;

(6) Require that dogs be on leashes;

(7) Annual nest site preparation;

(8) Mark and avoid up to 22 nests at SSTC-S, SSTC-N Beaches, plus any additional nests that exceed 22 that are initiated in beach lanes Orange 1 and Orange 2;

(9) Protect nesting and foraging areas at NAS North Island, SSTC-North, SSTC-South, and Delta Beach from predation by supporting consistent and effective predator management;

(10) Enhance and disallow mowing of remnant dune areas as potential nest sites in areas that can be protected from human disturbance and predators during nesting season;

(11) Conduct monitoring throughout Naval Base Coronado and establish a consistent approach to monitoring nesting attempts and hatching success to determine the success of predator management activities, and limit predator-prey interactions by fencing unless it conflicts with U.S. Navy training;

(12) Identify opportunities to use dredge material that has high sand content for expansion and rehabilitation of beach areas at NAS North Island and Delta Beach to create improved nesting substrate;

(13) Minimize activities that can affect invertebrate populations necessary for Pacific Coast WSP foraging by prohibiting beach raking on Naval Base Coronado beaches, with the exception of the area immediately in front of the Navy Lodge at NAS North Island and Camp Surf at SSTC-South;

(14) If any relocation of nest/eggs is necessary as a protective measure, each nest/egg will be relocated the shortest distance possible into suitable habitat by Service-approved monitors to increase the chance of nest success;

(15) Identify conflicts for immediate action and response;

(16) Public outreach to military residents of adjacent housing;

(17) Post signs to eliminate human trespassers during nesting season and possibly for nest avoidance as well; and

(18) Work with the Service and others to develop a regional approach to managing and conserving the habitat needed to sustain Pacific Coast WSP.

The 2010 SSTC BO (08B0503-09F0517, p. 128) also specifies that if new information reveals that the increased training is affecting Pacific Coast WSP in a manner inconsistent with the conclusion of the Biological Opinion, then reinitiation of consultation may be warranted. If monitoring indicates that the western snowy plover numbers within the area of increased military training decline below the 5-year average, as determined by maximum active nest numbers—average of 18 plover pairs at SSTC (range of 11 to 22); 10 plover pairs at NASNI (range of 7 to 14); and 8 plover pairs at SSSB (range of 5 to 9)—reinitiation of consultation may be warranted. If snowy plover use of SSTC beaches declines, Service and U.S. Navy biologists will evaluate alternative

explanations for any observed decline (such as, continuation of low productivity associated with predation) and the need for additional conservation measures. This cooperative relationship allows the Service to work closely with the U.S. Navy for the continued implementation of beneficial measures to Pacific Coast WSP, while minimizing impacts associated with the increased training activities that are required for military readiness.

Based on the above considerations, and in accordance with section 4(a)(3)(B)(i) of the Act, we have determined that the identified lands are subject to the Naval Base Coronado INRMP and that the conservation efforts identified in the existing Service-approved INRMP will provide a benefit to Pacific Coast WSP features essential to its conservation and will benefit Pacific Coast WSPs occurring in habitats within and adjacent to NAS North Island, SSTC-North, and SSTC-South. We also anticipate that the draft revised INRMP will provide a similar if not greater benefits to Pacific Coast WSPs, but will reopen this designation as necessary to evaluate the conservation efforts in Naval Base Coronado's final revised INRMP. Therefore, lands within this installation (Units CA 55A, CA 55C, CA 55D, and CA 55H) are exempt under section 4(a)(3) of the Act. We are not including approximately 734 ac (297 ha) of habitat in this revised final critical habitat designation because of this exemption.

Table 5 below provides approximate land areas (ac, ha) that meet the definition of critical habitat but are exempt from designation under section 4(a)(3)(B) of the Act.

Table 5. Exemptions from designation by critical habitat unit.

Unit	Specific Area	Basis for Exemption	Areas Meeting the Definition of Critical Habitat in ac (ha)	Areas Exempted in ac (ha)
CA 22	Naval Support Area Monterey	4(a)(3)(B)	8 ac (3 ha)	8 ac (3 ha)
CA 32	Vandenberg Air Force Base North	4(a)(3)(B)	711 ac (288 ha)	711 ac (288 ha)
CA 33	Vandenberg Air Force Base South	4(a)(3)(B)	423 ac (171 ha)	423 ac (171 ha)
CA 40	Naval Base Ventura County Point Mugu, Mugu Lagoon North	4(a)(3)(B)	136 ac (55 ha)	136 ac (55 ha)
CA 41	Naval Base Ventura County Point Mugu, Mugu Lagoon South	4(a)(3)(B)	72 ac (29 ha)	72 ac (29 ha)
CA 42	Naval Base Ventura County, San Nicolas Island	4(a)(3)(B)	321 ac (130 ha)	321 ac (130 ha)
CA 49	Marine Corps Base (MCB) Camp Pendleton	4(a)(3)(B)	441 ac (179 ha)	441 ac (179 ha)
CA 55A	Naval Base Coronado, Naval Air Station North Island	4(a)(3)(B)	142 ac (57 ha)	142 ac (57 ha)
CA 55C	Naval Base Coronado Silver Strand Beach	4(a)(3)(B)	436 ac (176 ha)	436 ac (176 ha)
CA 55D	Naval Base Coronado Delta Beach	4(a)(3)(B)	90 ac (36 ha)	90 ac (36 ha)
CA 55H	Naval Base Coronado Naval Radio Receiving Facility	4(a)(3)(B)	66 ac (27 ha)	66 ac (27 ha)
Total				2,846 ac (1,151 ha)

Exclusions

Application of Section 4(b)(2) of the Act

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if he determines the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific data available, that the decision not to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor.

In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise his discretion to exclude the area only if such exclusion would not result in the extinction of the species.

When identifying the benefits of inclusion for an area, we consider the additional regulatory benefits that area would receive from the protection from adverse modification

or destruction as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

When considering the benefits of exclusion, we consider, among other things, whether exclusion of a specific area is likely to result in conservation; the continuation, strengthening, or encouragement of partnerships; or implementation of a management plan that provides equal to or more conservation than a critical habitat designation would provide.

In the case of the Pacific Coast WSP, the benefits of critical habitat include public awareness of the Pacific Coast WSP's presence and the importance of habitat protection, and in cases where a Federal nexus exists, increased habitat protection for the Pacific Coast WSP due to the protection from adverse modification or destruction of critical habitat.

When we evaluate the existence of a conservation or management plan when considering the benefits of exclusion, we consider a variety of factors, including but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive

management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After evaluating the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then determine whether exclusion would result in extinction. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

Based on the information provided by entities seeking exclusion, as well as any additional public comments received and information in our files, we evaluated whether certain lands in the revised proposed critical habitat were appropriate for exclusion from this revised final designation pursuant to section 4(b)(2) of the Act. We considered the areas discussed below for exclusion under section 4(b)(2) of the Act, and present our detailed analysis below. For those areas in which the Secretary has exercised his discretion to exclude, we conclude that:

- (1) Their value for conservation will be preserved in the near future by existing protective actions, or
- (2) The benefits of excluding the particular area outweigh the benefits of their inclusion, based on the “other relevant factor” provisions of section 4(b)(2) of the Act.

We are excluding a total of approximately 3,797 ac (1,537 ha) of land from critical habitat for the Pacific Coast WSP. Table 6 below provides approximate areas (ac, ha) of lands in each State by unit that meet the definition of critical habitat but are being excluded under section 4(b)(2) of the Act from the final critical habitat rule. Maps showing excluded areas are available upon request by contacting the Arcata Fish and Wildlife Office (see the **ADDRESSES** section).

Table 6. Areas excluded from critical habitat designation by critical habitat unit.

Unit/Subunit	Area Excluded Under Section 4(b)(2) of the Act
HABITAT CONSERVATION PLANS	
Oregon Parks and Recreation Department HCP	
<i>UNIT</i>	ac (ha)
OR 1 Columbia River Spit	169 (68)
OR 2 Necanicum River Spit	200 (81)
OR 3 Nehalem River Spit	299 (121)
OR 4 Bayocean Spit	166 (67)
OR 5 Netarts Spit	541 (219)
OR 6 Sand Lake South	195 (79)
OR 7 Sutton/Baker Beaches	96 (39)
OR 8B Siltcoos River Spit	125 (51)
OR 8C Dunes Overlook/Tahkenitch Creek Spit	333 (135)
OR 8D North Umpqua River Spit	177 (71)
OR 9 Tenmile Creek Spit	21 (8)
OR 10 Coos Bay North Spit	35 (14)
OR 11 Bandon to New River	475 (192)
OR 12 Elk River Spit	167 (68)
OR 13 Euchre Creek Spit	107 (43)
<i>Subtotal for OPRD HCP Lands</i>	3,106 (1,257)
Southern California Multi-species HCPs and other Management Plans	
<i>UNIT</i>	ac (ha)
CA 50A Batiquitos Lagoon	24 (10)
CA 50B Batiquitos Lagoon	23 (9)
CA 50C Batiquitos Lagoon	19 (8)
CA 52B San Dieguito Lagoon	3 (1)

Unit/Subunit	Area Excluded Under Section 4(b)(2) of the Act
CA 52C San Dieguito Lagoon	4 (2)
CA 53 Los Penasquitos Lagoon	32 (13)
CA 54A Fiesta Island	2 (1)
CA 54B Mariner's Point	7 (3)
CA 54C South Mission Beach	38 (15)
CA 54D San Diego River Channel	51 (21)
CA 55E Sweetwater Marsh National Wildlife Refuge and D Street Fill	53 (21)
CA 55G Chula Vista Wildlife Reserve	10 (4)
<i>Subtotal for all Southern CA Plans</i>	266 (108)
<i>Subtotal for all HCP Lands in OR and CA</i>	3,372 (1,365)
TRIBAL LANDS	
Shoalwater Bay Tribe	
<i>UNIT</i>	ac (ha)
Shoalwater Bay tribal lands within WA3B Shoalwater/Graveyard Spit	425 (172)
<i>Subtotal for Tribal Lands</i>	425 ac (172 ha)
TOTAL AREA EXCLUDED UNDER 4(b)(2)	3,797 (1,537)

*Values in this table may not sum due to rounding.

Exclusions Based on Economic Impacts

Under section 4(b)(2) of the Act, we consider the economic impacts of specifying any particular area as critical habitat. In order to consider economic impacts, we prepared a draft economic analysis of the proposed critical habitat designation and related factors (Industrial Economics Incorporated (IEc) 2011, pp. 1–130). The draft analysis, dated September 15, 2011, was made available for public review and comment from January 17, 2012, through February 16, 2012 (77 FR 2243). Following the close of the comment period, a final analysis (dated March 23, 2012) of the potential economic

effects of the designation was developed taking into consideration the public comments and any new information (IEc 2012, pp. 1–131).

The intent of the final economic analysis (FEA) is to quantify the economic impacts of all potential conservation efforts for the Pacific Coast WSP; some of these costs will likely be incurred regardless of whether we designate critical habitat (baseline). The economic impact of the final critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.” The “without critical habitat” scenario represents the baseline for the analysis, considering protections already in place for the species (e.g., under the Federal listing and other Federal, State, and local regulations). The baseline, therefore, represents the costs incurred regardless of whether critical habitat is designated. The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts are those not expected to occur absent the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat above and beyond the baseline costs; these are the costs we consider in the final designation of critical habitat. The analysis looks retrospectively at baseline impacts incurred since the species was listed, and forecasts both baseline and incremental impacts likely to occur with the designation of critical habitat.

The FEA also addresses how potential economic impacts are likely to be distributed, including an assessment of any local or regional impacts of habitat

conservation and the potential effects of conservation activities on government agencies, private businesses, and individuals. The FEA measures lost economic efficiency associated with residential and commercial development and public projects and activities, such as economic impacts on water management and transportation projects, Federal lands, small entities, and the energy industry. Decision makers use this information to assess whether the effects of the designation might unduly burden a particular group or economic sector. Finally, the FEA looks retrospectively at costs that have been incurred since 1993 (year of the species' listing) (58 FR 12864; March 5, 1993), and considers those costs that may occur in the 20 years following the designation of critical habitat, which was determined to be the appropriate period for analysis because limited planning information was available for most activities to forecast activity levels for projects beyond a 20-year timeframe. The FEA quantifies economic impacts of the Pacific Coast WSP conservation efforts associated with the following categories of activity: (1) Recreation; (2) commercial and residential development; (3) gravel mining; (4) military activities; and (5) habitat and species management.

Nearly 86 percent of the critical habitat is not expected to experience any incremental impacts. In some of these units, the critical habitat area is subject to existing HCPs or land management plans that incorporate plover conservation. For other units, no future land use threats (e.g., development or transportation projects) are forecast to occur (IEc 2012, p. 4-1).

In the DEA, the major cost was associated with military operations at Vandenberg Air Force Base, which was proposed for designation as Units CA 32 and 33 in our March 2011 proposed revised designation. Vandenberg Air Force Base subsequently completed a Secretarial-approved INRMP and has been exempted from this final revised designation under section 4(a)(3) of the Act (see **Exemptions** section).

The FEA estimates total potential incremental economic impacts in areas proposed as revised critical habitat over the next 20 years (2012 to 2032) to be \$266,000, annualized at \$25,100 using a 7 percent discount rate. These totals include the potential incremental impacts associated with inclusion of Vandenberg Air Force Base and, as a result of its exemption from this final designation, the total potential incremental impacts may be less. These costs represent additional administrative effort as part of future consultations under section 7 of the Act. We do not expect that the designation will result in additional conservation efforts for the plover due to the nature of the known projects. Exhibit 4-2 provides the estimated incremental impacts by activity (IEc 2012, p. 4-6). Development activities have the highest incremental impact at \$50,000, followed by habitat and species management at \$16,700, and mining at \$10,500.

Development

The FEA estimates the largest impacts of the proposed revised critical habitat rule would result from real estate development. The FEA has identified two commercial resort developments that may be affected by the designation of critical habitat for the

Pacific Coast WSP. The total incremental impacts within Unit CA 22 are estimated to be \$17,100 (\$1,610 annualized) at a 7 percent discount rate and include the administrative cost of addressing adverse modification during consultation as well as any additional conservation efforts necessary to avoid adverse modification (IEc 2012, pp. 4-4, 4-12–4-14). These costs are assuming that a Federal nexus would be identified for the proposed project; currently, however, there is no federal nexus and thus consultation under section 7 is not required. Indirect costs (i.e., lost potential income to local business and construction jobs) may also be associated with this unit and the project proponents have estimated these impacts to be approximately \$30 million annually to the local economy if the projects are not allowed to proceed due to litigation or other permit proceedings not connected with this critical habitat designation (IEc 2012, p. 4-14). These estimates could not be verified by our economic analysis. Both development sites are located at the southerly end of Unit CA 22 in Sand City, California. The first development site, commonly known as the “Sterling/McDonald” site, is jointly owned by a private developer and the Sand City Redevelopment Agency. The project proponents are presently in the process of developing an Environmental Impact Report (EIR) under CEQA. Project proponents expect the EIR to be completed in 6 months. The second site on the Sand City coastline is the Security National Guaranty (SNG) development site (formerly known as the Lonestar site). Similar to the Sterling McDonald site, the SNG site is planned for a mixed-use visitor-serving resort. The hotel-condo resort will include up to 341 units. Pursuant to CEQA, the resort has undergone a full EIR along with an addendum update and peer review.

These development projects do not have a Federal nexus and thus consultation with the Service under section 7 of the Act is not required. Due to the lack of a Federal nexus, no direct impacts of critical habitat designation are expected; however, indirect impacts (i.e. lost potential income to local business and construction jobs) are possible in the event that other permitting processes or litigation unrelated to this designation affect project approvals (IEc 2012, pp. 4-12–4-13). SNG has prepared a detailed habitat protection plan (HPP) that evaluates and mitigates potential impacts to any presence of sensitive biological resources, including the Pacific Coast WSP. Conservation measures contained within the HPP related to the plover include: fencing and signage around construction; Pacific Coast WSP surveys prior to, during, and after construction; erection of exclosures and signage if any nesting Pacific Coast WSPs are discovered; predator management; permanent conservation easement for Pacific Coast WSP habitat on the property; and quarterly and annual reporting to the Service (IEc 2012, p. 4-13).

One additional development project was identified in subunit CA 55B by the City of Coronado. The City of Coronado has developed a conceptual plan for a Class 1 bike path and pedestrian trail for the Central Beach area in subunit CA 55B. If this plan moves forward, consultation with the Service would occur if there is a Federal nexus. The total incremental impacts within this unit are estimated to be \$4,670 (\$441 annualized) at a 7 percent discount rate and include the administrative cost of addressing adverse modification during consultation as well as any additional conservation efforts necessary to avoid adverse modification (IEc 2012, pp. 4-5, 4-14).

Recreation

The majority of incremental costs associated with recreation are at the Oceano Dunes State Vehicular Recreation Area (SVRA). Oceano Dunes SVRA is one of several Off-Highway Vehicle (OHV) areas administered by the CDPR and encompasses roughly 3,590 ac (1,453 ha) in San Luis Obispo County; approximately 1,500 ac (607 ha) are designated for camping and OHV use. Portions of Oceano Dunes SVRA are located within Unit CA 31. While there is no federal nexus for activities at Oceano Dunes SVRA, CDPR is working with the Service to develop a habitat conservation plan in connection with obtaining an incidental take permit. An intra-Service consultation under section 7 would be required for issuance of the permit. Consequently, the direct incremental impacts identified are a result of section 7 administrative costs and are estimated to be approximately \$9,580 (\$904 annualized, at a 7 percent discount rate); however, additional indirect costs may also be associated with this unit (IEc 2012, pp. 4-4, 4-10–4-12).

Mining

Gravel mining has occurred within Unit CA 6 and within the Eel River basin for decades and has been regulated under a variety of programs, including under section 404 of the Clean Water Act and the Rivers and Harbors Act, which are administered by the USACE. Currently, six gravel extractors operate in Unit CA 6 under a countywide permit issued by the USACE. A biological opinion has been issued for the gravel mining

operations, and the USACE is required to re-initiate consultation to renew the Letter of Permission during the life of the permit. The USACE must consult with the Service again in 2014, 2019, 2024, and 2029. The direct incremental impacts identified are a result of section 7 administrative costs and are estimated to be approximately \$10,500 (\$995 annualized, at a 7 percent discount rate) (IEc 2012, pp. 4-3, 4-18–4-19).

Habitat and Species Management

We have consulted on many habitat and species management projects throughout the range of the Pacific Coast WSP. The FEA has identified four habitat and species management activities that would require consultation under section 7 of the Act. The projects include: (1) A habitat restoration project in subunit WA 3B; (2) the draft Fort Ord Dunes HCP; (3) the Santa Barbara County Parks Department draft HCP for Rancho Guadalupe Dunes County Park in Unit CA 31; and (4) the draft HCP for Oceano Dunes SVRA for the CDPR. Individual costs for each unit are summarized in Exhibit 4-1 (IEc 2012, pp. 4-3–4-6). The total estimated costs associated with these projects are \$16,700 (\$1,580 annualized, at a 7 percent discount rate) (IEc 2012, pp. 4-21–4-23).

Because the FEA did not identify any disproportionate, or unreasonable costs that are likely to result from the designation of revised final critical habitat, the Secretary did not consider exercising his discretion to exclude any areas from this designation of critical habitat for the Pacific Coast WSP based on economic impacts. A copy of the FEA with supporting documents may be obtained by contacting the Arcata Fish and

Wildlife Office (see **ADDRESSES**) or by downloading from the Internet at <http://www.regulations.gov>.

Exclusions Based on National Security Impacts

Under section 4(b)(2) of the Act, we consider whether there are lands owned or managed by the Department of Defense (DOD) where a national security impact might exist. In preparing this proposal, we have exempted from the designation of critical habitat those DOD lands with completed INRMPs determined to provide a benefit to the Pacific Coast WSP. We have also determined that the remaining lands within the proposed designation of critical habitat for the species are not owned or managed by the Department of Defense, and, therefore, we anticipate no impact on national security.

In comments received from the Navy on our 2011 revised proposed rule, we were notified that approximately 8 ac (3 ha) associated with a Navy school (Naval Support Area Monterey) along the Monterey Bay coast was identified within the revised proposed critical habitat for the Pacific Coast WSP. These DOD lands have been exempted from the revised final designation under section 4(a)(3) of the Act (see **Exemptions**).

The Navy also identified that approximately 0.08 ac (0.03 ha) at Naval Base Ventura County, Port Hueneme, was included in the revised proposed rule. These lands were inadvertently included as part of Unit CA 39 in the revised proposed designation due to a mapping error. The identified 0.08 ac (0.03 ha) of Navy lands within Unit CA

39, Ormond Beach, have been removed in this revised final designation because they are unsuitable habitat and not essential to the conservation of the species.

No other DOD lands have been identified within the revised final designation. Consequently, the Secretary is not exercising his discretion to exclude any areas from this revised final designation based on impacts on national security.

Exclusions Based on Other Relevant Impacts

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts to national security. We consider a number of factors including whether the landowners have developed any HCPs or other management plans for the area, or whether there are conservation partnerships that would be encouraged by designation of, or exclusion from, critical habitat. In addition, we look at any tribal issues, and consider the government-to government relationship of the United States with tribal entities. We also consider any social impacts that might occur because of the designation.

Land and Resource Management Plans, Conservation Plans, or Agreements based on Conservation Partnerships

We consider a current land management or conservation plan (HCPs, as well as other types) to provide adequate management or protection for Pacific Coast WSP and its habitat if it meets the following criteria:

(1) The plan is complete and provides the same or better level of protection from adverse modification or destruction than that provided through a consultation under section 7 of the Act;

(2) There is a reasonable expectation that the conservation management strategies and actions will be implemented for the foreseeable future and effective, based on past practices, written guidance, or regulations; and

(3) The plan provides adaptive management and conservation strategies and measures consistent with currently accepted principles of conservation biology.

Habitat Conservation Plans (HCPs)

Section 10(a)(1)(B) of the Act authorizes us to issue to non-Federal entities a permit for the incidental take of endangered and threatened species. This permit allows a non-Federal landowner to proceed with an activity that is legal in all other respects, but that results in the incidental taking of a listed species (i.e., take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity). The Act specifies that an application for an incidental take permit must be accompanied by a habitat conservation plan, and specifies the content of such a plan. The purpose of HCPs is to describe and ensure that the effects of the permitted action on covered species are

adequately minimized and mitigated, and that the action does not appreciably reduce the survival and recovery of the species. In our assessment of HCPs associated with this final rulemaking, the analysis required for these types of exclusions involves careful consideration of the benefits of designation versus the benefits of exclusion. The benefits of designation typically arise from additional section 7 protections, as well as enhanced public awareness once specific areas are identified as critical habitat. The benefits of exclusion generally relate to relieving regulatory burdens on existing conservation partners, maintaining good working relationships with them, and encouraging the development of new partnerships.

Some HCP permittees have expressed the view that critical habitat designation on lands covered by an HCP devalues the conservation efforts of the plan's proponents, and could undermine the partnerships fostered through the development and implementation of the plans. They believe critical habitat designation on HCP lands would discourage development of additional HCPs and other conservation plans in the future. Where an existing HCP provides for protection for a species and its essential habitat within the plan area, or where the existence of a Federal nexus for future activities is uncertain, the benefits of preserving existing partnerships by excluding the covered lands from critical habitat are most significant. Excluding lands owned by or under the jurisdiction of the permittees of an HCP, under these circumstances, promotes positive working relationships and eliminates impacts to existing and future partnerships while encouraging development of additional HCPs for other species.

Large-scale HCPs take many years to develop and foster an ecosystem-based approach to habitat conservation planning, by addressing conservation issues through a coordinated approach. If local jurisdictions were to require landowners to obtain incidental take permits (ITP) individually prior to the issuance of a building permit under section 10 of the Act, this would result in uncoordinated, patchy conservation that would be less likely to achieve listed species recovery. We actively work to foster partnerships with local jurisdictions and encourage development of regional HCPs that afford proactive, landscape-level conservation for multiple species, including voluntary protections for covered species.

The proposed rule to revise designated habitat for the Pacific Coast WSP (76 FR 16046; March 22, 2011) did not specifically identify any HCP, management plan, or conservation partnership that the Service was proposing at that time for exclusion under section 4(b)(2) of the Act. The Service did indicate that it was seeking input from the public as to whether the Secretary should exclude HCP areas or other such areas under management that benefits the Pacific Coast WSP from the final revised designation, and mentioned that there were areas in the revised proposed designation that were included in management plans or other large-scale HCPs, such as the Oregon Parks and Recreation Department (OPRD) Habitat Conservation Plan. The Service also sought input on exclusions of Tribal Lands from the final revised designation. In developing the revised final critical habitat and weighing the benefits of exclusion versus inclusion, we have analyzed these areas that are managed under a HCP, similar management plan, or conservation partnership and have determined that several units or portions of units that

were included in the revised proposed designation are managed consistent with the intent of the exclusion language. We discuss each of these areas below.

Oregon Parks and Recreation Department Habitat Conservation Plan

The OPRD HCP was permitted under section 10(a)(1)(B) of the Act in 2011, and covers about 230 mi (370 km) of sandy shore within the range of the Pacific Coast WSP in Oregon. The associated incidental take permit (ITP) authorizes incidental take of the Pacific Coast WSP caused by public use and recreation management activities, natural resources management activities, and beach management activities along the coast of Oregon for a period of 25 years (Service 2011).

The HCP-covered lands consist of the “Ocean Shore,” an area defined by Oregon State statute as the sandy areas of the Oregon coast between the extreme low tide and the actual of statutory vegetation line, whichever is farther landward. HCP-covered lands do not include the Federal lands within the “Ocean Shore” boundary. In the areas adjacent to Federal lands, the covered lands extend from the extreme low tide to the mean high tide. Covered lands are either owned and leased by OPRD as a State Park or Natural Area or managed under a statutory recreation easement within the Ocean Shore (Oregon Revised Statute 390.635 and 390.620; Oregon Administrative Rule 736-020-0040(3)). Federal lands are not covered by the HCP and were, therefore, not considered for exclusion.

Conservation measures to be implemented on the covered lands will be focused on 16 management areas that were identified to have the greatest potential to provide Pacific Coast WSP habitat when considered in the context of recreational use of the Ocean Shore, historical Pacific Coast WSP use, and the biological requirements of the species.

The OPRD either owns or leases five of these management areas, which are identified as “Snowy Plover Management Areas” (SPMAs): (1) Columbia River South Jetty; (2) Necanicum Spit; (3) Nehalem Spit; (4) Bandon; and (5) Netarts Spit. The remaining 11 potential management areas are identified as “Recreation Management Areas” (RMAs) and are adjacent to upland areas owned by other landowners but are located within the area defined as Ocean Shore. Together, the 16 management areas span approximately 48 mi (77 km) of the 230 mi (370 km) of sandy Ocean Shore in Oregon.

The conservation measures (Table 7) include: (1) Implementation of Pacific Coast WSP management activities on OPRD-owned or -leased SPMAs; (2) implementation of recreational use restrictions at SPMAs and RMAs owned by other landowners; and (3) implementation of beach management activities on the Ocean Shore.

Table 7. Summary of Pacific Coast WSP Conservation Objectives within the Oregon Parks and Recreation Department HCP.

Area Specific Management Objectives	Conservation Benefit to Pacific Coast WSP
Restrict activities near nesting habitat during the breeding season (March 15 through September 15).	Protect nesting and foraging areas
Restore and maintain plover nesting habitat	Protect, restore, or enhance breeding and

Area Specific Management Objectives	Conservation Benefit to Pacific Coast WSP
	foraging areas
Restore, maintain, and manage currently unoccupied sites for plover nesting	Protect, restore, or enhance breeding and foraging areas
Manage predators within plover nesting areas	Protect individuals, eggs, and young
Monitor breeding and nonbreeding population	Ensure effectiveness of plover conservation measures in HCP
Conduct public outreach and education about plovers and their habitat	Protect nesting and foraging areas
Provide law enforcement of HCP rules and regulations	Protect nesting and foraging areas
If wintering plovers are impacted by covered activities or climate change is impacting plovers within the covered lands, modify the HCP to respond to changed circumstances	Protect wintering, nesting, and foraging plovers
Ensure site-specific management actions are prioritized and completed through individual site management plans	Protect, restore, or enhance breeding, wintering, and foraging areas.

Under the OPRD HCP, site management plans are required by the HCP for each area managed for Pacific Coast WSPs. Site management plans include management prescriptions specific to individual management areas and describe how the conservation measures required by the HCP (i.e., recreation management, habitat restoration and maintenance, predator management, monitoring, enforcement, and public outreach and education) will be completed at each managed area. Site management plans also outline the extent of seasonal recreational use restrictions for each area and are approved by the Service, and are reviewed every 5 years to ensure the provisions are providing conservation benefits and meeting the intent of the HCP.

The Bandon State Natural Area (SNA) is managed as the Bandon SPMA. OPRD has completed a draft site management plan, which has been submitted to the Service for review and approval. This site management plan further describes how the conservation

measures, required in the HCP, will be completed at Bandon SPMA. Active management of the Bandon SPMA, per this site management plan, will begin in 2013. In the interim, OPRD continues to manage plovers at the site by restricting recreational access, providing public education, law enforcement, and habitat restoration and management. The site management plan will specify the long-term implementation of the OPRD HCP provisions at Bandon SPMA.

In addition to the occupied Bandon SPMA, as many as four areas currently unoccupied by the Pacific Coast WSP have been identified as SPMAs and targeted for management of potential nesting populations of the Pacific Coast WSP over the term of the 25-year ITP. Three SPMAs will initially be managed by OPRD for nesting populations of Pacific Coast WSP: (1) Columbia River South Jetty; (2) Necanicum Spit; and (3) Nehalem Spit.

By 2013, OPRD will prepare site management plans for that describe how restoration and management measures required by the HCP are implemented at these three unoccupied SPMAs. Active management will begin the nesting season after site plans have been approved by the Service, starting in 2014. One additional SPMA, Netarts Spit, could also be managed if (1) the Columbia River South Jetty, Necanicum Spit, or the Nehalem Spit SPMA becomes occupied; and (2) one of the RMAs is not already under active, Service-approved management for the Pacific Coast WSP. Under these circumstances, OPRD will commit to managing Netarts Spit for nesting populations of the Pacific Coast WSP to ensure that a minimum of three unoccupied SPMAs are

being actively managed at any given time over the term of the 25-year ITP.

As discussed above, RMAs extend from the extreme low tide line to the mean high tide line on Federal lands, and from the mean low tide line to the statutory or actual vegetation line, whichever is most landward, on all other lands. Under the HCP, the OPRD will implement recreational use restrictions at up to 11 RMAs, which include; Bayocean Spit, South Sand Lake Spit, Sutton/Baker Beach, Siltcoos Estuary/Dunes Overlook/Tahkenitch Estuary, Tahkenitch South, Umpqua River North Jetty, Tenmile, Coos Bay North Spit, New River, Elk River, and Euchre Creek.

If a RMA or the area immediately inland of a RMA becomes occupied by the Pacific Coast WSP, but a site management plan does not exist, the OPRD will automatically implement recreational use restrictions on HCP-covered lands between March 15 and September 15 of each year. These restrictions will remain in place until an agreement is reached between the Service and the landowner on conservation, any recommended conservation actions or a site management plan is developed by OPRD. The OPRD will also be notified of any changes that may modify the application of recreational use restrictions to a more focused area, based on the conservation needs of the plovers at the site, as outlined in the HCP. The provisions to implement restrictions on the covered lands allow OPRD to protect plovers within covered lands regardless of the management on the adjacent areas. In addition, a memorandum of understanding has been completed and signed by all involved State and Federal agencies, ensuring consistent management of plovers across jurisdictional boundaries according to the

provisions of the HCP.

In the event that a Service-approved site management plan has been developed, the OPRD will implement recreational use restrictions in cooperation with the landowner as directed by the site management plan. If an RMA and the areas immediately inland of the RMA are unoccupied by the Pacific Coast WSP, the OPRD will only implement recreational use restrictions at the request of the landowner and after consultation with the Service and collaboration with the OPRD. The OPRD will also work with county and private landowners adjacent to RMAs to provide supervision, enforcement, and signage on their lands, because such restrictions (ropes, signs, enforcement) cannot be implemented by a private landowner on the Ocean Shore without OPRD approval.

If a Pacific Coast WSP should nest on HCP-covered lands outside an occupied or unoccupied SPMA or RMA, the OPRD will install fencing around the individual nest in coordination with the landowner, and will consider installing a nest enclosure after consultation with the Service. Specifically, the OPRD will install a 164-foot (50-m radius) roped buffer around the nest that allows access along the wet sand, and will determine, through coordination with the Service, if use of an enclosure to protect the nest from predation is appropriate. The OPRD will also work with the Service and the landowner to install signage, as appropriate, to indicate the presence of nesting Pacific Coast WSPs.

The terms of the OPRD HCP and associated ITP only addressed impacts to

Pacific Coast WSPs during the breeding season. The HCP concluded that the impacts of covered activities did not rise to the level of take for wintering Pacific Coast WSPs. Therefore, OPRD did not request coverage by the ITP for activities that occur outside the breeding season, nor did the OPRD HCP include provisions for wintering habitat management or protection. However, the provisions for habitat management of nesting areas within the covered lands should provide conservation value for wintering habitat within the conservation area by providing protections during the nonbreeding season to foraging, roosting, and winter use areas. In addition, OPRD included a provision that would require amendment of the HCP, if covered activities were determined to adversely impact wintering Pacific Coast WSPs, based on annual monitoring.

The OPRD HCP has provisions for adaptive management to address uncertainties in achieving conservation objectives for Pacific Coast WSP habitat, including uncertainties that may be associated with climate change. The adaptive management strategy helps to ensure management will continue to be consistent with agreed-upon Pacific Coast WSP conservation objectives. Climate change and associated sea-level rise were considered “changed circumstances” that may require additional conservation measures of OPRD. In the event that sea-level rise results in loss of Pacific Coast WSP nesting habitat over the term of the HCP, OPRD and the Service will determine appropriate conservation measures necessary to respond to the changed circumstance.

Benefits of Inclusion — Oregon Parks and Recreation Department HCP

The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not destroy or adversely modify designated critical habitat. This would provide an additional benefit beyond that provided under the jeopardy standard which obligates Federal agencies to consult under section 7 of the Act with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. If a federally listed species does not occupy an area where a proposed action may occur, Federal agencies are not obligated to consult with us to ensure actions do not jeopardize the species' existence. However, the designation of critical habitat in such unoccupied areas provides an additional layer of regulatory review that would require Federal agencies to consult with us to ensure that critical habitat is not adversely modified. Therefore, there may be an additional regulatory benefit to designating critical habitat in unoccupied areas that we have determined to be essential.

In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

Critical habitat designation can also result in ancillary conservation benefits to the Pacific Coast WSP by triggering additional review and conservation through other Federal laws. The Federal laws most likely to afford protection to designated Pacific Coast WSP habitat are the Clean Water Act (CWA), Coastal Zone Management Act (CZMA; 16 U.S.C. 1451 *et seq.*), and the Rivers and Harbors Act (RHA; 33 U.S.C. 401 *et seq.*). Projects requiring a review under the CWA, CZMA, and RHA that are located within critical habitat or are likely to affect critical habitat would create a Federal nexus and trigger section 7 consultation under the Act. Examples of potential projects that may trigger consultation as a result of CWA, CZMA, and RHA include beach restoration (such as, beach replenishment or removal of nonnative plants) and channel dredging.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the Pacific Coast WSP and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable.

Benefits of Exclusion — Oregon Parks and Recreation Department HCP

The benefits of excluding from designated critical habitat the approximately 3,106 ac (1,257 ha) of lands owned and managed by the Oregon Parks and Recreation Department are significant and include the measures summarized in Table 7 above.

We have created close partnerships with the OPRD and several other stakeholders through the development of the OPRD HCP, which incorporates protections and management objectives for the Pacific Coast WSP and the habitat upon which it depends for breeding, sheltering, and foraging activities. The conservation strategy identified in the OPRD HCP, along with our close coordination with OPRD, addresses the identified threats to Pacific Coast WSP and the geographical areas that contain the physical or biological features essential to the conservation of the species in the areas identified in Table 6. The management objectives identified within this conservation strategy seek to achieve conservation goals for Pacific Coast WSPs and their habitat, and thus can be of greater conservation benefit than the designation of critical habitat, which does not require specific actions. Thus, the OPRD HCP provides a greater benefit to the Pacific Coast WSP than would designating critical habitat. Therefore, the relative benefits of designation of critical habitat on these lands are diminished and limited.

Conservation measures that provide a benefit to Pacific Coast WSP and its habitat have been implemented in the areas owned and managed by the OPRD. These measures will continue to be implemented as the OPRD and the Service finalize site-specific management plans on covered lands. Such measures include protection of nesting and foraging areas, predator management at nest sites, and trash clean-up at occupied sites.

Excluding the approximately 3,106 ac (1,257 ha) owned and managed by the OPRD from the critical habitat designation will sustain and enhance the working relationship between the Service and the OPRD. The willingness of the OPRD to work with the Service on innovative ways to manage federally listed species will continue to reinforce those conservation efforts and our partnership, which contribute significantly toward achieving recovery of Pacific Coast WSP. We consider this voluntary partnership in conservation vital to our understanding of the status of species on non-Federal lands and necessary for us to implement recovery actions such as habitat protection and restoration, and beneficial management actions for species.

The Benefits of Exclusion Outweigh the Benefits of Inclusion — Oregon Parks and Recreation Department HCP

We reviewed and evaluated the exclusion of approximately 3,106 ac (1,257 ha) of land owned and managed by the OPRD from our designation of critical habitat. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from critical habitat designation are almost entirely redundant with the regulatory, educational, and ancillary benefits already afforded through the OPRD HCP and under State and Federal law.

The OPRD HCP provides for significant conservation and management of the geographical areas that contain the physical or biological features essential to the conservation of the Pacific Coast WSP and help achieve recovery of this species through

the objectives as described in Table 7. Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with the OPRD, other stakeholders, and project proponents through the development and ongoing implementation of the OPRD HCP. These partnerships are focused on conservation of multiple species, including Pacific Coast WSP, and secure conservation benefits for the species that will lead to recovery, as described above, beyond those that could be required under a critical habitat designation. Furthermore, these partnerships aid in fostering future partnerships for the benefit of listed species.

We also conclude that the educational benefits of designating critical habitat on lands owned and managed by the OPRD would be negligible because there have been numerous opportunities for public education and outreach related to Pacific Coast WSP over the 10-year development of the HCP. In addition, the HCP includes public education and related tasks to conserve plovers on the entire Oregon coast. Western snowy plovers are State-listed throughout Oregon, and as a result, they receive a high degree of conservation oversight and management within the State. The OPRD HCP has gone through the State's public review and input process, and again through the Federal public review and input process under NEPA. These processes have provided extensive opportunities to educate the public and landowners about the location of plovers and plover habitat, and efforts to conserve the physical or biological features essential to the conservation of Pacific Coast WSP.

Pacific Coast WSP currently occupies areas that are owned and managed by the OPRD and covered by its HCP (refer to Table 3). Because one of the primary threats to the Pacific Coast WSP is habitat loss and degradation, the consultation process under section 7 of the Act for projects with a Federal nexus will, in evaluating effects to the plovers, evaluate the effects of the action on the conservation or functionality of the habitat for the Pacific Coast WSP regardless of whether critical habitat is designated for these lands; a similar analysis would be performed to conduct the adverse modification analysis (IEc 2011, p. D-3). Consultation will continue to occur in areas outside the covered lands that remain critical habitat, but not on the excluded areas. However, the HCP has provisions for protecting and restoring plover habitat on occupied and unoccupied lands that far exceed the conservation afforded by section 7 consultation. These measures will not only prevent the degradation of essential features of plover habitat, but they will improve and maintain these features over time.

We have determined that the management actions provided through implementation of the OPRD HCP, in conjunction with our partnership with the OPRD, provide a greater benefit to Pacific Coast WSP than would critical habitat designation. Furthermore, we have determined that the additional regulatory benefits of designating critical habitat in the occupied areas afforded through the section 7(a)(2) consultation process, are minimal because of limited Federal nexus and conservation measures which specifically benefit Pacific Coast WSP and its habitat are in place to address unoccupied areas. We also conclude that the educational and ancillary benefits of designating the geographical areas containing the physical or biological features essential to the

conservation of the Pacific WSP would be minimal, because the HCP process has already provided considerable public education and ancillary benefits. Therefore, in consideration of the factors discussed above in the *Benefits of Exclusion* section, including the relevant impact to current and future partnerships, we have determined that the significant benefits of exclusion of lands covered by the OPRD HCP outweigh the benefits of critical habitat designation.

Exclusion Will Not Result in Extinction of the Species— Oregon Parks and Recreation Department HCP

We have determined that the exclusion of 3,106 ac (1,257 ha) from the designation of critical habitat for the Pacific Coast WSP of lands owned and managed by the OPRD, as identified in the OPRD HCP will not result in extinction of the species because current conservation efforts under the plan adequately protect the geographical areas containing the physical or biological features essential to the conservation of the species. For projects affecting plovers in occupied areas, the jeopardy standard of section 7 of the Act, coupled with protection provided by OPRD HCP, would provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Based on the above discussion, the Secretary is exercising his discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation portions of the units or subunits that are within the OPRD HCP boundary (refer to Table 6), totaling 3,106 ac (1,257 ha) of land.

Multiple Species Conservation Program (MSCP)—City of San Diego Subarea Plan

The MSCP is a comprehensive habitat conservation planning program that encompasses 582,243 ac (235,626 ha) within 12 jurisdictions of southwestern San Diego County, California (County of San Diego 1998). The MSCP identifies the conservation needs of 85 federally listed and sensitive species, including the Pacific Coast WSP, and serves as the basis for development of subarea plans by each jurisdiction in support of section 10(a)(1)(B) permits. The MSCP identifies where mitigation activities should be focused, such that upon full implementation of the subarea plans approximately 171,920 ac (69,574 ha) of the MSCP plan area will be preserved and managed for covered species (County of San Diego 1998, pp. 2–1, 4-2–4-4).

Conservation of the Pacific Coast WSP is addressed in the MSCP and in the City of San Diego Subarea Plan. The section 10(a)(1)(B) permit for the City of San Diego Subarea Plan was issued on July 18, 1997 (Service 1997). The City of San Diego Subarea Plan identifies areas where mitigation activities should be focused to assemble preserve areas in the Multi-Habitat Planning Area (MHPA); additional preserve areas within the MSCP (i.e., outside the City of San Diego Subarea Plan jurisdiction) include Pre-Approved Mitigation Areas (PAMA).

When completed at the end of the 50-year permit term, the public sector (Federal, State, and local government, and the general public) will have contributed 108,750 ac

(44,010 ha) (63 percent) to the preserve areas, of which 81,750 ac (33,083 ha) (48 percent) was existing public land when the MSCP was established, and 27,000 ac (10,927 ha) (16 percent) will have been acquired. At completion, the private sector will have contributed 63,170 ac (25,564 ha) (37 percent) to the preserve areas as part of the development process, either through avoidance of impacts or as compensatory mitigation for impacts to biological resources outside the preserve. Currently, and in the future, Federal and State governments, local jurisdictions and special districts, and managers of privately owned land will manage and monitor their land in the preserve within the MHPA for species and habitat protection (County of San Diego 1998, pp. 2-1, 4-2–4-4).

The MSCP requires the City of San Diego to develop framework and site-specific management plans, subject to the review and approval of the Service and CDFG, to guide the management of all preserve land under City control. Currently, the framework plan for the City of San Diego is in place. The City of San Diego has not yet completed site-specific management plans for some lands containing Pacific Coast WSP, including some lands we are excluding from critical habitat designation (CA 52B–C and CA 53). However, the City of San Diego has completed the Mission Bay Natural Resources Management Plan, which addresses Pacific Coast WSP within Mission Bay (CA 54A–D).

Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude from critical habitat, all proposed subunits within the City of San Diego Subarea Plan boundaries, including a portion of proposed subunits within San Dieguito Lagoon

(CA 52B–C), all of the proposed unit at Los Penasquitos Lagoon (CA 53), and all proposed subunits within Mission Bay (CA 54A–D). This area encompasses approximately 137 ac (55 ha) of land. We did not exclude one subunit within the San Dieguito Lagoon (CA 52A) as this area is not within the boundaries of the City of San Diego Subarea Plan. All areas containing the physical or biological features essential to the conservation of the species that occur on non-Federal lands covered by the City of San Diego Subarea Plan under the MSCP are excluded from the final critical habitat designation.

Benefits of Inclusion—City of San Diego Subarea Plan under the MSCP

The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not destroy or adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. If a federally listed species does not occupy an area where a proposed action may occur, Federal agencies are not obligated to consult with us to ensure actions do not jeopardize the species' existence. However, the designation of critical habitat in such unoccupied areas provides an additional layer of regulatory review that would require Federal agencies to consult with us to ensure that critical habitat is not adversely modified. Therefore, there may be an additional regulatory benefit to designating critical

habitat in unoccupied areas that we have determined to be essential, such as Fiesta Island (CA 54A).

In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

Critical habitat designation can also result in ancillary conservation benefits to the Pacific Coast WSP by triggering additional review and conservation through other Federal laws. The Federal laws most likely to afford protection to designated Pacific Coast WSP habitat are the Clean Water Act (CWA), Coastal Zone Management Act (CZMA), and the Rivers and Harbors Act (RHA). Projects requiring a review under the CWA, CZMA, and RHA that are located within critical habitat or are likely to affect critical habitat would create a Federal nexus and trigger section 7 consultation under the Act. Examples of potential projects that may trigger consultation as a result of CWA, CZMA, and RHA include beach restoration (such as, beach replenishment or removal of nonnative plants) and channel dredging. Thus, review of Federal actions affecting designated critical habitat units would consider the importance of this habitat to the

species and the protections required for the species and its habitat.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the Pacific Coast WSP and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable.

Benefits of Exclusion—City of San Diego Subarea Plan under the MSCP

The benefits of excluding from designated critical habitat the approximately 137 ac (55 ha) of land within the boundaries of the City of San Diego Subarea Plan are significant and include: (1) That the conservation management objectives for Pacific Coast WSP and its habitat identified in the City of San Diego Subarea Plan, described in Table 8 below, would continue to be implemented into the future; (2) continued and strengthened effective working relationships with all MSCP jurisdictions and stakeholders to promote the conservation of the Pacific Coast WSP and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur; (4) encouragement of other jurisdictions with completed subarea plans under the MSCP to amend their plans to cover and benefit the Pacific Coast WSP and its habitat; (5) encouragement of other coastal jurisdictions within the range of Pacific Coast WSP to

complete HCPs or subarea plans under the MSCP that cover or are adjacent to Pacific Coast WSP habitat (including the cities of Coronado and Imperial Beach); and (6) encouragement of additional HCP and other conservation plan development in the future on other private lands that include the Pacific Coast WSP and other federally listed species.

Table 8. Summary of Pacific Coast WSP Conservation Objectives within the City of San Diego Subarea Plan under the MSCP.

Area Specific Management Objectives	Conservation Benefit to Pacific Coast WSP
Protect nesting sites from human disturbance during the reproductive season	Protect breeding areas
Implement specific measures to protect against detrimental edge effects	Protect, restore, or enhance breeding and foraging areas
Ensure that incidental take (during the breeding season) associated with maintenance or removal of levees or dikes is not authorized except as specifically approved by wildlife agencies	Protect individuals and nests
Ensure the conservation of: 99 percent of saltpan habitat; 90–95 percent of remaining beach habitat outside of intensively used beaches; and 93 percent of potential habitat	Protect nesting, wintering, and foraging areas

We have created close partnerships with the City of San Diego and several other stakeholders through the development of the City of San Diego Subarea Plan, which incorporate protections and management objectives (described in Table 8 above) for the Pacific Coast WSP and the habitat upon which it depends for breeding, sheltering, and foraging activities. The conservation strategy identified in the subarea plan, along with our close coordination with the city and other stakeholders, addresses the identified threats to Pacific Coast WSP and the geographical areas that contain the physical or biological features essential to its conservation. The conservation gains to the Pacific

Coast WSP identified within the City of San Diego Subarea Plan are more beneficial than designation of critical habitat because inclusion in critical habitat does not require beneficial management actions. Thus, the City of San Diego Subarea Plan provides a greater benefit to the Pacific Coast WSP than would designation of critical habitat. Our partnership with the City of San Diego helps ensure implementation of the protections and management actions identified within the City of San Diego Subarea Plan. Therefore, the relative benefits of designation of critical habitat on these lands are diminished and limited.

Excluding lands within the MSCP from the critical habitat designation will sustain and enhance the working relationship between the Service and the City of San Diego. The willingness of the City to work with the Service on innovative ways to manage federally listed species will continue to reinforce those conservation efforts and our partnership, which contribute significantly toward achieving recovery of Pacific Coast WSP.

By excluding the approximately 137 ac (55 ha) of land within the boundaries of the City of San Diego Subarea Plan from critical habitat designation, we are encouraging new partnerships with other landowners and jurisdictions to protect the Pacific Coast WSP and other listed species. Our ongoing partnerships with the City of San Diego, the larger regional MSCP participants, and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the Pacific Coast WSP. We consider this voluntary partnership in conservation vital to our understanding of the status of species on non-Federal lands and necessary for us to

implement recovery actions such as habitat protection and restoration, and beneficial management actions for species.

The Benefits of Exclusion Outweigh the Benefits of Inclusion—City of San Diego Subarea Plan under the MSCP

We have reviewed and evaluated the exclusion of approximately 137 ac (55 ha) of land within the boundaries of the City of San Diego Subarea Plan. The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from critical habitat designation are almost entirely redundant with the regulatory, educational, and ancillary benefits already afforded through the City of San Diego Subarea Plan and under State and Federal laws. The City of San Diego Subarea Plan provides for significant conservation and management of the geographical areas that contain the physical or biological features essential to the conservation of the Pacific Coast WSP and help achieve recovery of this species through the objectives as described in Table 8.

Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with local jurisdictions and project proponents through the development and ongoing implementation of the MSCP and the City of San Diego Subarea Plan. These partnerships are focused on conservation of multiple species, including Pacific Coast WSP, and secure conservation benefits for the species that will lead to recovery, as described above, beyond those that could be required under a critical

habitat designation. Furthermore, these partnerships aid in fostering future partnerships for the benefit of listed species, the majority of which do not occur on Federal lands and thus are less likely to result in a section 7 consultation.

We also conclude that the educational benefits of designating critical habitat within the City of San Diego Subarea Plan boundaries would be negligible because there have been several opportunities for public education and outreach related to Pacific Coast WSP. The framework for the regional MSCP was developed over a 7-year period; the City of San Diego Subarea plan has been in place since 1997. Implementation of the subarea plan is formally reviewed yearly through publicly available annual reports and a public meeting, providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve, the physical or biological features essential to the conservation of Pacific Coast WSP.

Within the City of San Diego Subarea Plan boundaries, Pacific Coast WSP currently occupies all but one subunit (CA 54A). Any project with a Federal nexus will require consultation under section 7 of the Act in those subunits occupied by Pacific Coast WSPs. Furthermore, because one of the primary threats to the Pacific Coast WSP is habitat loss and degradation, the consultation process required under section 7 of the Act for a project with a Federal nexus will, in evaluating effects to the plovers, most likely evaluate the effects of the action on the conservation or functionality of occupied habitat for the Pacific Coast WSP and thus the jeopardy analysis would be similar to that performed to conduct the adverse modification analysis (IEc 2011, p. D-3). Therefore,

there would be minimal additional benefit of designating critical habitat within the boundaries of the City of San Diego Subarea Plan. The management objectives identified within this conservation strategy seek to achieve conservation goals for Pacific Coast WSPs and their habitat, and thus can be of greater conservation benefit than the designation of critical habitat, which does not require specific actions, particularly in the unoccupied subunit CA 54A. The City of San Diego Subarea Plan would ensure the conservation of 99 percent of saltpan habitat; 90–95 percent of remaining beach habitat outside of intensively used beaches; and 93 percent of potential habitat. We have determined that the additional regulatory benefits of designating critical habitat in the occupied areas afforded through the section 7(a)(2) consultation process are minimal because of limited Federal nexus, and because of conservation measures in place which specifically benefit Pacific Coast WSP and its habitat. These conservation measures also provide for conservation of Pacific Coast WSP habitat in unoccupied areas. The City of San Diego Subarea Plan will also manage saltpan habitat within the MSCP used by Pacific Coast WSP for breeding and the City will implement measures to protect nesting sites from human disturbance during the reproductive season, control predators, and protect against detrimental edge effects (Service 1997, p. 110–111).

We have determined that the additional regulatory benefits of designating occupied areas as Pacific Coast WSP critical habitat, such as protection afforded through the section 7(a)(2) consultation process, are minimal. Furthermore, the conservation objectives identified by the City of San Diego Subarea Plan, in conjunction with our partnership with the City of San Diego will provide a greater benefit to the species than

critical habitat designation, especially in areas that are not currently occupied because the specific measures identified above in the plan that benefit the plover and its habitat will be implemented regardless of the species presence. We also conclude that the educational and ancillary benefits of designating critical habitat for Pacific WSP within the City of San Diego Subareas Plan boundaries would be negligible because of the partnership established between the Service and the City of San Diego, the management objectives identified in the City of San Diego Subarea Plan, the educational outreach that has occurred as part of the subarea planning process, and the independent regulatory protection already provided under the subarea plan. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion* section above, we determined the significant benefits of exclusion outweigh the benefits of critical habitat designation.

Exclusion Will Not Result in Extinction of the Species— City of San Diego Subarea Plan under the MSCP

We determine that the exclusion of 137 ac (55 ha) of land from the designation of critical habitat for the Pacific Coast WSP within the boundaries of the City of San Diego Subarea Plan will not result in extinction of the species because current conservation efforts under the subarea plan adequately protect the geographical areas containing the physical or biological features essential to the conservation of the species. In our 1997 Biological Opinion, the Service determined that implementation of the City of San Diego Subarea Plan is not likely to result in jeopardy to Pacific Coast WSP (Service 1997, p.

111). Therefore, based on the benefits described above, we have determined that this exclusion would not result in the extinction of the Pacific Coast WSP. Based on the above discussion, the Secretary is exercising his discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation a portion of proposed subunits within San Dieguito Lagoon (CA 52B–C), all of the proposed unit at Los Penasquitos Lagoon (CA 53), and all proposed subunits within Mission Bay (CA 54A–D) addressed by the City of San Diego Subarea Plan under the MSCP, totaling 137 ac (55 ha) of land.

Multiple Habitat Conservation Program (MHCP)—Carlsbad Habitat Management Plan (Carlsbad HMP)

The MHCP is a comprehensive habitat conservation planning program that encompasses 111,908 ac (45,279 ha) within seven jurisdictions in northwestern San Diego County, California, including the cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. The MHCP was designed to create, manage, and monitor an ecosystem preserve. The MHCP is a subregional plan that identifies the conservation needs of 77 federally listed and sensitive species, including Pacific Coast WSP, and serves as the basis for development of subarea plans by each jurisdiction in support of section 10(a)(1)(B) permits. The subregional MHCP identifies where mitigation activities should be focused, such that upon full implementation of the subarea plans over 20,000 ac (8,094 ha) of the MHCP plan area will be preserved and managed for covered species (AMEC Earth and Environmental, Inc. (AMEC) and Conservation Biology Institute (CBI) 2003, p. E-16). The MHCP is also a subregional

plan under the State of California's Natural Communities Conservation Plan (NCCP) program and was developed in cooperation with CDFG. The MHCP preserve system is intended to protect viable occurrences of native plant and animal species and their habitats in perpetuity, while accommodating continued economic development and quality of life for residents of northern San Diego County.

Conservation of Pacific Coast WSP is addressed in the subregional plan and in the Carlsbad HMP. The section 10(a)(1)(B) permit for the City of Carlsbad HMP was issued on November 9, 2004 (Service 2004a). The Carlsbad HMP identifies areas where mitigation activities should be focused to assemble preserve areas within the Focused Planning Areas (FPAs). The FPAs are comprised of "hard line" preserves, indicating that lands will be conserved and managed for biological resources, and "soft line" planning areas, within which preserve areas will ultimately be delineated and managed based on further data and planning (AMEC and CBI 2003, p. ES-6). Those areas of the MHCP preserve that are already conserved, as well as those designated for inclusion in the preserve under the plan, are referred to as the "preserve area" in this revised final critical habitat designation. Conservation within the FPAs will be achieved by the implementing measures documented in each city's subarea plan, including land use regulation, minimization of impacts, mitigation, and acquisition of parcels from willing sellers (AMEC and CBI 2003, p. ES-6).

The Carlsbad HMP was approved by the Service on October 15, 2004. Approximately 24,570 ac (9,943 ha) of land are within the Carlsbad HMP planning area,

with about 8,800 ac (3,561 ha) remaining as natural habitat for species covered under the plan. Of this remaining habitat, the Carlsbad HMP proposes to establish a preserve system covering approximately 6,786 ac (2,746 ha). The MHCP requires the City of Carlsbad to develop area-specific management directives to address species and habitat needs for the preserve areas, including lands that support Pacific Coast WSP, and its habitat, and requires the City of Carlsbad to describe specific policies that will be implemented for the MHCP, subject to the review and approval of the Service and CDFG, to guide the City's preserve system. The City of Carlsbad has not yet completed area-specific management directives for some lands that support Pacific Coast WSP and its habitat. However, the MSCP, which has been approved and permitted by the Service and CDFG, provides an overarching conservation benefit for the Pacific Coast WSP, and the Carlsbad HMP includes numerous conservation measures to benefit the Pacific Coast WSP and its habitat and will be implemented regardless of any area specific plan (see Table 9). Furthermore, the City has demonstrated their commitment to implementation of the HMP since its approval in 2004, and we are confident their commitment will continue into the future as they establish the preserve system and the directives that will govern management of the preserve lands. Therefore, the lands identified as critical habitat subunit CA 50A–C which are addressed within the Carlsbad HMP are being excluded from this revised critical habitat designation. Currently, and in the future, Federal and State governments, local jurisdictions and special districts, and managers of privately owned land will manage and monitor their land in the preserve within the FPA for species and habitat protection (AMEC and CBI 2003, p. E-24).

Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude from critical habitat, all proposed subunits within Batiquitos Lagoon (CA 50A–C) that are addressed by the Carlsbad HMP under the Multiple Habitat Conservation Program (MHCP). This area encompasses approximately 66 ac (27 ha) of land. All geographical areas containing the physical or biological features essential to the conservation of the species that occur on non-Federal lands covered by the Carlsbad HMP under the MHCP are excluded from the final critical habitat designation.

Benefits of Inclusion—Carlsbad HMP under the MHCP

The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize or fund do not destroy or adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. If a federally listed species does not occupy an area where a proposed action may occur, Federal agencies are not obligated to consult with us to ensure actions do not jeopardize the species' existence. However, the designation of critical habitat in such unoccupied areas provides an additional layer of regulatory review that would require Federal agencies to consult with us to ensure that critical habitat is not adversely modified. Therefore, there may be an additional regulatory benefit to designating critical habitat in unoccupied areas that we have determined to be essential.

In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

Critical habitat designation can also result in ancillary conservation benefits to the Pacific Coast WSP by triggering additional review and conservation through other Federal laws. The Federal laws most likely to afford protection to designated Pacific Coast WSP habitat are the Clean Water Act (CWA), Coastal Zone Management Act (CZMA), and the Rivers and Harbors Act (RHA). Projects requiring a review under the CWA, CZMA, and RHA that are located within critical habitat or are likely to affect critical habitat would create a Federal nexus and trigger section 7 consultation under the Act. Examples of potential projects that may trigger consultation as a result of CWA, CZMA, and RHA include beach restoration (such as replenishment or removal of nonnative plants) and channel dredging. Thus, review of Federal actions affecting designated critical habitat units would consider the importance of this habitat to the species and the protections required for the species and its habitat.

Another important benefit of including lands in a critical habitat designation is that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the Pacific Coast WSP and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable.

Benefits of Exclusion—Carlsbad HMP under the MHCP

The benefits of excluding from designated critical habitat the approximately 66 ac (27 ha) of land within the boundaries of the Carlsbad HMP are significant and include:

- (1) An assurance that the conservation management objectives for Pacific Coast WSP and its habitat contained in the Carlsbad HMP, as described in Table 9 below, will be implemented into the future;
- (2) continued and strengthened effective working relationships with all MHCP jurisdictions and stakeholders to promote the conservation of the Pacific Coast WSP and its habitat;
- (3) continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur;
- (4) encouragement of other jurisdictions with completed subarea plans under the MHCP to amend their plans to cover and benefit the Pacific Coast WSP and its habitat;
- (5) encouragement of other coastal jurisdictions within the range of Pacific Coast WSP to complete HCPs or subarea plans under the MHCP that cover or are adjacent to Pacific Coast WSP habitat (including the cities of Encinitas, Oceanside, and Solana Beach); and
- (6) encouragement of additional HCP and other

conservation plan development in the future on other private lands that include the Pacific Coast WSP and other federally listed species.

Table 9. Summary of Pacific Coast WSP Conservation Objectives within the Carlsbad HMP.

Area Specific Management Objectives	Conservation Benefit to Pacific Coast WSP
Conserve saltmarsh and estuarine habitats at Buena Vista, Agua Hedionda, and Batiquitos Lagoons consistent with the City of Carlsbad's wetland policy	Protect nesting, wintering, and foraging areas
Assure no net loss of saltmarsh and estuarine habitats within the City of Carlsbad	Protect, restore, or enhance foraging areas
Conserve all major populations within the City of Carlsbad, i.e., at Agua Hedionda and Batiquitos Lagoons	Protect individuals
Assure no direct impacts to nesting areas	Protect nests
Manage preserve areas to minimize edge effects; control nonnative plants; maintain hydrology and water quality; protect habitats from physical disturbances; and control predators	Protect, restore, or enhance breeding, wintering, and foraging areas
Restore and enhance habitat in preserved areas, where possible	Protect, restore, or enhance breeding, wintering, and foraging areas
Restrict activities near nesting habitat during the breeding season (April 1 through August 31)	Protect individuals and nests
Implement access control measures for areas where populations are present during the nonbreeding season, if warranted	Protect individuals

We have created close partnerships with the City of Carlsbad and several other stakeholders through the development of the Carlsbad HMP, which incorporates protections and management objectives (described in Table 9 above) for the Pacific Coast WSP and the habitat upon which it depends for breeding, sheltering, and foraging activities. The conservation strategy identified in the Carlsbad HMP, along with our close coordination with each city and other stakeholders, addresses the identified threats

to Pacific Coast WSP and the geographical areas that contain the physical or biological features essential to its conservation. The conservation gains to the Pacific Coast WSP identified within the Carlsbad HMP are more beneficial than designation of critical habitat because critical habitat designation does not require beneficial management actions. Thus, the Carlsbad HMP provides a greater benefit to the Pacific Coast WSP than would designating critical habitat. Our partnership with the City of Carlsbad helps ensure implementation of the protections and management actions identified within the Carlsbad HMP. Therefore, the relative benefits of designation of these lands are diminished and limited.

By excluding the approximately 66 ac (27 ha) of land within the boundaries of the Carlsbad HMP from critical habitat designation, we are encouraging new partnerships with other landowners and jurisdictions to protect the Pacific Coast WSP and other listed species. Our ongoing partnerships with the City of Carlsbad, the larger regional MHCP participants, and the landscape-level multiple species conservation planning efforts they promote, are essential to achieve long-term conservation of the Pacific Coast WSP. We consider this voluntary partnership in conservation vital to our understanding of the status of species on non-Federal lands and necessary for us to implement recovery actions, such as habitat protection and restoration, and beneficial management actions for species.

The Benefits of Exclusion Outweigh the Benefits of Inclusion—Carlsbad HMP under the MHCP

The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from critical habitat designation are almost entirely redundant with the regulatory, educational, and ancillary benefits already afforded through the Carlsbad HMP and under State and Federal law. The Carlsbad HMP provides for significant conservation and management of the geographical areas that contain the physical or biological features essential to the conservation of the Pacific Coast WSP and help achieve recovery of this species through the objectives as described in Table 9.

Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with local jurisdictions and project proponents through the development and ongoing implementation of the MHCP and Carlsbad HMP. These partnerships are focused on conservation of multiple species, including Pacific Coast WSP, and secure conservation benefits for the species that will lead to recovery, as described above, beyond those that could be required under a critical habitat designation. Furthermore, these partnerships aid in fostering future partnerships for the benefit of listed species, the majority of which do not occur on federal lands and thus are less likely to result in a section 7 consultation.

We also conclude that the educational benefits of designating critical habitat within the boundaries of the Carlsbad HMP would be negligible because there have been several opportunities for public education and outreach related to Pacific Coast WSP. The framework for the regional MHCP was developed over a 12-year period; the

Carlsbad HMP has been in place since 2004. Implementation of the subarea plan is formally reviewed yearly through publicly available annual reports and a public meeting, providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve, the physical or biological features essential to the conservation of Pacific Coast WSP.

Within the Carlsbad HMP boundaries, any project with a Federal nexus will require consultation under section 7 of the Act because Pacific Coast WSP currently occupies all proposed subunits within the plan boundaries. Furthermore, because one of the primary threats to the Pacific Coast WSP is habitat loss and degradation, the consultation process required under section 7 of the Act for a project with a Federal nexus will, when analyzing effects to plovers, most likely evaluate the effects of the action on the conservation or functionality of occupied habitat for the Pacific Coast WSP and thus the jeopardy analysis would be similar to that performed to conduct the adverse modification analysis (IEc 2011, p. D-3). Therefore, there would be minimal additional benefit of designating critical habitat within the boundaries of the Carlsbad HMP.

We have determined that the additional regulatory benefits of designating critical habitat for Pacific Coast WSP within the boundaries of the Carlsbad HMP, such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating critical habitat for Pacific WSP within the boundaries of the Carlsbad HMP would be negligible because of the partnership established between the Service and the City of Carlsbad, the

management objectives identified in the Carlsbad HMP, and the independent regulatory protection already provided under the Carlsbad HMP. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion* section above, we determine that the significant benefits of exclusion outweigh the benefits of critical habitat designation.

Exclusion Will Not Result in Extinction of the Species—Carlsbad HMP under the MHCP

We determine that the exclusion of 66 ac (27 ha) of land from the designation of critical habitat for the Pacific Coast WSP within the boundaries of the Carlsbad HMP will not result in extinction of the species because current conservation efforts under the Carlsbad HMP adequately protect the geographical areas containing the physical or biological features essential to the conservation of the species. In our 2004 Biological Opinion, the Service determined that the MHCP subregional and the City's subarea plans are not likely to jeopardize the continued existence or recovery of the Pacific Coast WSP (Service 2004, pp. 148–149). No direct impacts are expected from the MHCP subregional plan or the City's subarea plan due to 100 percent conservation of the coastal lagoons and because the MHCP will not allow any take of individuals or nests of Pacific Coast WSP. Therefore, we have determined that this exclusion will not result in the extinction of the Pacific Coast WSP. Based on the above discussion, the Secretary is exercising his discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation all proposed subunits within Batiquitos Lagoon (CA 50A–C) that are addressed by the Carlsbad HMP under the MHCP, totaling 66 ac (27 ha) of land.

Other Management Plans

San Diego Bay Natural Resources Plan

In a collaborative strategy, the Port of San Diego and the U.S. Department of the Navy, Southwest Division prepared an INRMP for the San Diego Bay in September of 2000 (San Diego Bay INRMP)(U.S. Navy and San Diego Unified Port District 2000, p. xxi). The lands within the boundaries of the San Diego Bay INRMP that were proposed as revised critical habitat include Sweetwater Marsh National Wildlife Refuge and D Street Fill (CA 55E) and Chula Vista Wildlife Reserve (CA 55G). These lands are owned and managed by the Port of San Diego. As described above under the section titled **Exemptions**, all lands in the San Diego Bay that are owned or managed by the U.S. Department of the Navy are exempted from critical habitat as a result of benefits provided to Pacific Coast WSP based on a separate and distinct INRMP (Naval Base Coronado INRMP).

Because subunits CA 55E and CA 55G are not owned or controlled by the Department of Defense, but rather are owned and managed by the Port of San Diego, it is inappropriate to exempt the Port of San Diego lands from the critical habitat designation under section 4(a)(3)(B)(i) of the Act. However, after reviewing comments from the Port of San Diego concerning these subunits during both comment periods, conducting an analysis of the benefits of inclusion compared with the benefits of exclusion, and

determining that exclusion will not result in the extinction of the species, we are excluding these Port of San Diego lands (CA 55E and CA 55G) under section 4(b)(2) of the Act. We, hereafter, refer to the Port of San Diego management plan for the Port lands incorporated into the San Diego Bay INRMP as the San Diego Bay Natural Resources Plan.

The intent of the San Diego Bay Natural Resources Plan is to provide for stewardship of natural resources while supporting the ability of the Port of San Diego to achieve their mission within San Diego Bay. The plan is part of a larger strategy to assist the users of the San Diego Bay to make better, more cost-effective decisions about the development, conservation, restoration, and management of San Diego Bay. This strategy takes an ecosystem approach to management, whereby San Diego Bay is viewed as an ecosystem as opposed to a collection of individual species, sites, or projects, and management is addressed across ownership and jurisdictional boundaries. In conjunction with the San Diego Bay INRMP, the San Diego Bay Natural Resources Plan was developed through the cooperative effort of 13 governmental and nongovernmental organizations representing the primary working group known as the Technical Oversight Committee (TOC). The Service, a member of the TOC, participated in the development of the plan and is a signatory to the overarching San Diego Bay INRMP, which includes the Port of San Diego's lands.

The footprint of the San Diego Bay Natural Resources Plan encompasses both uplands adjacent to the bay and all tidelands bayward of the historical mean high tide.

Historical tideland areas owned or controlled by the Port of San Diego include 5,483 ac (2,219 ha) of nearly 15,000 ac (6,070 ha) of land and water within San Diego Bay, which collectively supports over 1,100 documented marine and terrestrial species (U.S. Navy and Port of San Diego 2011, p. 1-12), including Pacific Coast WSP.

In conjunction with the San Diego Bay INRMP, the San Diego Bay Natural Resources Plan is currently being revised (U.S. Navy, Southwest Division and Port of San Diego 2011). The Service is providing input during the development of this revision. The revised version includes many of the same objectives and strategies as the current version, although it expands coverage on water quality, sediment quality, sustainable development, and other topics. The revision also outlines additional benefits for Pacific Coast WSP. In February of 2012, a draft was released for public comment, and the Port of San Diego had a public meeting to allow members of the public to provide input. Both the San Diego Bay INRMP and the San Diego Bay Natural Resources Plan continue to be implemented while being updated and revised.

Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude from critical habitat a portion of proposed subunits within San Diego Bay, which includes the non-Federal lands portion of the Sweetwater Marsh National Wildlife Refuge and D Street Fill subunit (CA 55E) and the Chula Vista Wildlife Reserve subunit (CA 55G) addressed by the San Diego Bay Natural Resources Plan. This area encompasses approximately 63 ac (25 ha) of non-Federal land. A 79-ac (32-ha) portion of subunit CA 55E (Sweetwater Marsh National Wildlife Refuge and D Street Fill) is

Federal land that is a part of the greater San Diego Bay National Wildlife Refuge Complex and is not excluded from critical habitat designation.

Benefits of Inclusion—San Diego Bay Natural Resources Plan

The primary effect of designating any particular area as critical habitat is the requirement for Federal agencies to consult with us under section 7 of the Act to ensure actions they carry out, authorize, or fund do not destroy or adversely modify designated critical habitat. Absent critical habitat designation in occupied areas, Federal agencies remain obligated under section 7 of the Act to consult with us on actions that may affect a federally listed species to ensure such actions do not jeopardize the species' continued existence. If a federally listed species does not occupy an area where a proposed action may occur, Federal agencies are not obligated to consult with us to ensure actions do not jeopardize the species' existence. However, the designation of critical habitat in such unoccupied areas provides an additional layer of regulatory review that would require Federal agencies to consult with us to ensure that critical habitat is not adversely modified. Therefore, there may be an additional regulatory benefit to designating critical habitat in unoccupied areas that we have determined to be essential, such as Chula Vista Wildlife Reserve (CA 55G).

As stated above, the principal benefit of any designated critical habitat is that Federal activities will require section 7 consultations to ensure that adequate protection is provided to avoid adverse modification or destruction of critical habitat. This would

provide an additional benefit beyond that provided under the jeopardy standard. In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

Critical habitat designation can also result in ancillary conservation benefits to the Pacific Coast WSP by triggering additional review and conservation through other Federal laws. The Federal laws most likely to afford protection to designated Pacific Coast WSP habitat are the Clean Water Act (CWA), Coastal Zone Management Act (CZMA), and the Rivers and Harbors Act (RHA). Projects requiring a review under the CWA, CZMA, and RHA that are located within critical habitat or are likely to affect critical habitat would create a Federal nexus and trigger section 7 consultation under the Act. Examples of potential projects that may trigger consultation as a result of CWA, CZMA, and RHA include beach restoration (such as, beach replenishment or removal of nonnative plants) and channel dredging. Thus, review of Federal actions affecting designated critical habitat units would consider the importance of this habitat to the species and the protections required for the species and its habitat.

Another important benefit of including lands in a critical habitat designation is

that the designation can serve to educate landowners and the public regarding the potential conservation value of an area, and may help focus conservation efforts on areas of high conservation value for certain species. Any information about the Pacific Coast WSP and its habitat that reaches a wide audience, including parties engaged in conservation activities, is valuable.

Benefits of Exclusion—San Diego Bay Natural Resources Plan

The benefits of excluding from designated critical habitat the approximately 63 ac (25 ha) of lands owned and managed by the Port of San Diego within the San Diego Bay Natural Resources Plan are significant and include: (1) An expectation that the management objectives contained within the San Diego Bay Natural Resources Plan, as described in Table 10 below, will be implemented into the future; (2) continued and strengthened effective working relationships with the Port of San Diego and other jurisdictions and stakeholders in the San Diego Bay to promote the conservation of the Pacific Coast WSP and its habitat; (3) continued meaningful collaboration and cooperation in working toward recovering this species, including conservation benefits that might not otherwise occur; (4) encouragement of other coastal jurisdictions within the range of Pacific Coast WSP to complete management plans that provide a benefit to Pacific Coast WSP or its habitat; and (5) encouragement of future management plan development on private lands that include the Pacific Coast WSP and other federally listed species.

Table 10. Summary of Pacific Coast WSP Conservation Objectives within the San Diego Bay Natural Resources Plan.

Area Specific Management Objectives	Conservation Benefit to Pacific Coast WSP
Support consistent and effective predator management at nest sites	Protect nesting and foraging areas
Protect unvegetated areas or remnant dune sites above the high tide line which are potential nesting sites	Protect nesting and foraging areas
Reduce human use during nesting season, particularly in the upper dunes; enforce dog leashing; and post signs	Protect nesting and foraging areas
Clean up trash, which attracts predators.	Protect nesting and foraging areas
Prohibit beach raking which can affect invertebrate populations upon which the plover depends	Protect foraging areas
Enhance remnant dune areas as potential nest sites in areas that can be protected from human disturbance and predators during nesting season	Restore habitat for nesting adults
Remove ice plant (e.g., <i>Carpobrotus</i> sp.) and other nonnatives from remnant dunes	Restore habitat for nesting adults
Support broader beaches with gentler slopes to support plover nesting	Restore habitat for nesting adults
Conduct research and monitoring in support of the management objective (i.e., study the plover's preference for higher mudflat, so that function may be protected or enhanced)	Restore habitat for nesting adults

We have created close partnerships with the Port of San Diego and several other stakeholders through the development of the San Diego Bay Natural Resources Plan, which incorporates protections and management objectives (described above in Table 10) for the Pacific Coast WSP and the habitat upon which it depends for breeding, sheltering, and foraging activities. The conservation strategy identified in the San Diego Bay Natural Resources Plan, along with our close coordination with Port of San Diego, addresses the identified threats to Pacific Coast WSP and the geographical areas that contain the physical or biological features essential to its conservation on subunits CA

55E and CA 55G. The management objectives identified within this conservation strategy are more beneficial than designation of critical habitat on lands owned and managed by the Port of San Diego because critical habitat designation does not require beneficial management actions. Thus, the Port of San Diego Natural Resources Plan provides a greater benefit to the Pacific Coast WSP than would designating critical habitat. Therefore, the relative benefits of designation of critical habitat on these lands are diminished and limited.

Conservation measures that provide a benefit to Pacific Coast WSP and its habitat have been implemented in both subunits (CA 55E and CA 55G) owned and managed by the Port of San Diego since 2000. These measures will continue to be implemented as the Port of San Diego finalizes the revised plan (expected in late 2012). Such measures include protection of nesting and foraging areas, predator management at nest sites, prohibition of beach raking, and trash clean-up at occupied sites (described in Table 10 above) (U.S. Navy and San Diego Unified Port District 2000, p. 4-109; Maher, pers. comm. 2012).

Excluding the approximately 63 ac (25 ha) owned and managed by the Port of San Diego from the critical habitat designation will sustain and enhance the working relationship between the Service and the Port of San Diego. The willingness of the Port of San Diego to work with the Service on innovative ways to manage federally listed species will continue to reinforce those conservation efforts and our partnership, which contribute significantly toward achieving recovery of Pacific Coast WSP. We consider this voluntary partnership in conservation vital to our understanding of the status of

species on non-Federal lands and necessary for us to implement recovery actions such as habitat protection and restoration, and beneficial management actions for species.

The Benefits of Exclusion Outweigh the Benefits of Inclusion—San Diego Bay Natural Resources Plan

The benefits of including these lands in the designation are small because the regulatory, educational, and ancillary benefits that would result from critical habitat designation are almost entirely redundant with the regulatory, educational, and ancillary benefits already afforded through the San Diego Bay Natural Resources Plan and under State and Federal law.

The San Diego Bay Natural Resources Plan provides for significant conservation and management of the geographical areas that contain the physical or biological features essential to the conservation of the Pacific Coast WSP and help achieve recovery of this species through the objectives as described in Table 10. Exclusion of these lands from critical habitat will help preserve the partnerships we have developed with the Port of San Diego and project proponents through the development and ongoing implementation of the San Diego Bay Natural Resources Plan. These partnerships are focused on conservation of multiple species, including Pacific Coast WSP, and secure conservation benefits for the species that will lead to recovery, as described above, beyond those that could be required under a critical habitat designation. Furthermore, these partnerships aid in fostering future partnerships for the benefit of listed species, the majority of which do

not occur on federal lands and thus are less likely to result in a section 7 consultation.

We also conclude that the educational benefits of designating critical habitat on lands owned and managed by the Port of San Diego would be negligible because there have been several opportunities for public education and outreach related to Pacific Coast WSP. As part of the larger San Diego Bay INRMP, the San Diego Bay Natural Resources Plan has been in place since 2000. Additionally, as part of the larger San Diego Bay INRMP, implementation of the revised San Diego Bay Natural Resources Plan will be formally reviewed yearly through publicly available annual reports and a public meeting, again providing extensive opportunity to educate the public and landowners about the location of, and efforts to conserve, the physical or biological features essential to the conservation of Pacific Coast WSP. Members of the TOC, and specifically the Port of San Diego, are aware of the value of these lands to the conservation of Pacific Coast WSP, and conservation measures are already in place to protect Pacific Coast WSP habitat.

Pacific Coast WSP currently occupies one subunit (CA 55E) that is owned and managed by the Port of San Diego with the Port of San Diego Natural Resources Plan. Because one of the primary threats to the Pacific Coast WSP is habitat loss and degradation, the consultation process under section 7 of the Act for a project with a Federal nexus will, in analyzing effects to the plovers, most likely evaluate the effects of the action on the conservation or functionality of the habitat for the Pacific Coast WSP; a

similar analysis would be performed to conduct the adverse modification analysis (IEc 2011, p. D-3).

We have determined that the management actions provided through implementation of the San Diego Bay Natural Resources Plan, in conjunction with our partnership with the Port of San Diego, provide a greater benefit to Pacific Coast WSP than would critical habitat designation in the unoccupied subunit (CA 55G). As outlined in Table 10, the San Diego Bay Natural Resources Plan outlines numerous measures which benefit the Pacific Coast WSP including measures in currently unoccupied areas such as in subunit CA 55G. These measures include restoration of marginal habitat or areas currently not being used by the plover. Furthermore, we determine that the additional regulatory benefits of designating critical habitat in the occupied subunit (CA 55E), such as protection afforded through the section 7(a)(2) consultation process, are minimal. We also conclude that the educational and ancillary benefits of designating the geographical areas containing the physical or biological features essential to the conservation of the Pacific WSP provided by the San Diego Bay Natural Resources Plan would be negligible because of the partnership established between the Service and the Port of San Diego and the management objectives identified in the San Diego Bay Natural Resources Plan. Therefore, in consideration of the relevant impact to current and future partnerships, as summarized in the *Benefits of Exclusion* section above, we determined the significant benefits of exclusion outweigh the minor benefits of critical habitat designation.

Exclusion Will Not Result in Extinction of the Species—San Diego Bay Natural Resources Plan

We determined that the exclusion of 63 ac (25 ha) from the designation of critical habitat for the Pacific Coast WSP of lands owned and managed by the Port of San Diego, as identified in the San Diego Bay Natural Resources Plan will not result in extinction of the species because current conservation efforts under the plan adequately protect the geographical areas containing the physical or biological features essential to the conservation of the species. For projects affecting plovers in occupied areas, the jeopardy standard of section 7 of the Act, coupled with protection provided by the San Diego Bay Natural Resources Plan, provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Based on the above discussion, the Secretary is exercising his discretion under section 4(b)(2) of the Act to exclude from this final critical habitat designation a portion of proposed subunits within San Diego Bay (Sweetwater Marsh NWR and D Street Fill (CA 55E) and Chula Vista Wildlife Reserve (CA 55G)) that are addressed by the San Diego Bay Natural Resources Plan, totaling 63 ac (25 ha) of land. We also anticipate that the expected revisions to the existing San Diego Bay Natural Resources Plan will provide an even greater conservation benefit to the Pacific Coast WSP and its habitat due to our close working relationship with the Port of San Diego.

Tribal Lands—Exclusions Under Section 4(b)(2) of the Act

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951); Executive Order 13175; and the relevant provision of the Departmental Manual of the Department of the Interior (512 DM 2), we coordinate with federally-recognized Tribes on a government-to-government basis. Further, Secretarial Order 3206, "American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act" (1997) states that (1) critical habitat shall not be designated in areas that may impact tribal trust resources, may impact tribally-owned fee lands, or are used to exercise tribal rights unless it is determined essential to conserve a listed species; and (2) in designating critical habitat, the Service shall evaluate and document the extent to which the conservation needs of the listed species can be achieved by limiting the designation to other lands.

Habitat on tribal lands was determined to be essential to the conservation of Pacific Coast WSP due to its location within the matrix of habitat available for Pacific Coast WSP. Because Pacific Coast WSPs move between coastal sites based on site condition and season, connectivity among and within habitats is essential for long-term persistence and recovery of the Pacific Coast WSP. Beach and intertidal habitat on or adjacent to tribal lands were determined to be important to maintain nesting, foraging, and roosting habitat, and to maintain connectivity between breeding and wintering habitats. The longstanding and distinctive relationship between Federal and tribal governments is defined by treaties, statutes, executive orders, judicial decisions, and agreements, which differentiate tribal governments from the other entities that deal with,

or are affected by, the Federal government.

This relationship has given rise to a special Federal trust responsibility involving the legal responsibilities and obligations of the United States toward Indian Tribes and the application of fiduciary standards of due care with respect to Indian lands, tribal trust resources, and the exercise of tribal rights. Accordingly, we are obligated to consult with Tribes based on their unique relationship with the Federal government. In addition, we evaluate Tribes' past and ongoing efforts for species conservation and the benefits of including or excluding tribal lands in the designation under section 4(b)(2) of the Act.

We contacted all tribes potentially affected by the revised proposed designation and met with the Shoalwater Bay Tribe to discuss their ongoing and future management strategies for Pacific Coast WSP. We subsequently received a letter from the Shoalwater Bay Tribe describing ongoing tribal management, conservation efforts, and tribal coordination with the USACE. In their letter to us, the Shoalwater Bay Tribe stated that they do not participate in nontribal habitat designation processes (*i.e.*, process to designate critical habitat under the Act). The Tribe requested a section 4(b)(2) exclusion under the Act.

We determined approximately 425 ac (172 ha) of lands owned by, or under the jurisdiction of, the Tribe contained biological features essential to the conservation of the Pacific Coast WSP, and therefore meet the definition of critical habitat under the Act. These tribal lands are located in subunit WA 3B. In making our final decision with

regard to the designation of critical habitat for the Pacific Coast WSP on these tribal lands, we considered several factors, including Secretarial Order 3206, Executive Order 13175, the President's memorandum on "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951; April 29, 1994), conservation measures in place on these lands that may benefit the Pacific Coast WSP, economic impacts to tribes, our relationship with tribes, and impacts to current and future partnerships with the Shoalwater Bay Indian Tribe and other tribes we coordinate with on endangered and threatened species issues. Under section 4(b)(2) of the Act, the Secretary is exercising his discretion to exclude approximately 425 ac (172 ha) of tribal land from this revised final critical habitat designation. As described in our analysis below, this conclusion was reached after considering the relevant impacts of specifying these areas as critical habitat.

Shoalwater Bay Indian Tribe

The Shoalwater Bay Indian Tribe (Tribe) is a Federally-recognized tribe with a relatively small (approximately one square mile) reservation in Pacific County, Washington. Lands within the Shoalwater Bay Indian Reservation boundary include upland forested terrestrial habitats, a small residential and commercial area, and coastal marine habitats. Critical habitat for the Pacific Coast WSP was proposed in the portion of the reservation with coastal beaches as part of unit WA 3B. Through our ongoing coordination with the Tribe, we have established a partnership that has benefitted natural resource management on tribal lands. For our 4(b)(2) balancing analysis, we considered

our partnership with the Tribe and, therefore, analyzed the benefits of including and excluding those lands under the sovereign control of the Tribe that met the definition of critical habitat.

Existing tribal regulations, including the 2001 Tribal Environmental Codes that protect the saltmarsh and sand spit as natural areas, will ensure any land use actions, including those funded, authorized, or carried out by Federal agencies, are not likely to result in the destruction or adverse modification of all lands considered for exclusion. The Tribe coordinates with the Service on all actions that have the potential to affect habitat for listed species on the reservation, including the Pacific Coast WSP. In 2003, the Service completed a Planning Aid Letter, and in 2006, we wrote a Fish and Wildlife Coordination Act Report for the USACE (Shoalwater Bay Indian Tribe is the project sponsor) on the proposed Shoalwater Coastal Erosion Project, which entails beach nourishment along the sand spit used by the Pacific Coast WSP. We completed a section 7 consultation for this project in 2007. The Service coordinated with the Tribe and USACE on the project design. We are actively working with these partners in implementation of the project to avoid or minimize impacts to current Pacific Coast WSP nesting habitat. Since surveys were conducted and nesting was confirmed in 2006, the Tribe has played an active role in surveying for and protecting habitat for the Pacific Coast WSP. In an email, dated June 9, 2011, to the Service, the USACE indicated that they were in the process of developing a Snowy Plover Management Plan as part of the beach nourishment and coastal erosion project. In an August 31, 2011, letter to the Service, the Tribe confirmed that they will continue to use their existing regulatory

structure to “provide habitat protection for the Pacific Coast WSP” and “keep trespassers off those areas considered most important to the species,” and references the USACE’s intent to “develop a Pacific Coast WSP habitat protection plan as part of the erosion control project.” The Tribe and Service are coordinating with the USACE on drafting the habitat protection plan and implementation of the project, which is scheduled to start in late summer 2012 (pending surveys for the Pacific Coast WSP). We are also coordinating with the Tribe and the USACE on the planting/vegetation management plan. We are currently working on a memorandum of understanding with the Tribe regarding plover protection. Any potential impacts to the Pacific Coast WSP from future proposed activities on the tribal lands will be addressed through a section 7 consultation using the jeopardy standard, and such activities would also be subject to the take prohibitions in section 9 of the Act.

Benefits of Inclusion – Shoalwater Bay Tribe

The main benefit of any designated critical habitat is that Federal activities will require section 7 consultations to ensure that adequate protection is provided to avoid adverse modification or destruction of critical habitat. This would provide an additional benefit beyond that provided under the jeopardy standard. In evaluating project effects on critical habitat, the Service must be satisfied that the PCEs and, therefore, the essential features of the critical habitat likely will not be altered or destroyed by proposed activities to the extent that the conservation of the affected species would be appreciably reduced. If critical habitat were designated in areas of unoccupied habitat or currently occupied

areas subsequently become unoccupied, different outcomes or requirements are also likely because effects to unoccupied areas of critical habitat are not likely to trigger the need for a jeopardy analysis.

In *Sierra Club v. Fish and Wildlife Service*, 245 F.3d 434 (5th Cir. 2001), the Fifth Circuit Court of Appeals stated that the identification of habitat essential to the conservation of the species can provide informational benefits to the public, State and local governments, scientific organizations, and Federal agencies. The court also noted that critical habitat designation may focus and heighten public awareness of the plight of listed species and their habitats. Designation of critical habitat may contribute to conservation efforts by other parties by delineating areas of high conservation value for the Pacific Coast WSP.

The primary benefit of including an area in a critical habitat designation is the requirement for Federal agencies to ensure actions they fund, authorize, or carry out are not likely to result in the destruction or adverse modification of any designated critical habitat, the regulatory standard of section 7(a)(2) of the Act under which consultation is completed. Federal agencies must also consult with us on actions that may affect a listed species and refrain from undertaking actions that are likely to jeopardize the continued existence of such species. The analysis of effects of a proposed project on critical habitat is separate and different from that of the effects of a proposed project on the species itself. The jeopardy analysis evaluates the action's impact to survival and recovery of the species, while the destruction or adverse modification analysis evaluates the action's

effects to the designated habitat's contribution to conservation. Therefore, the difference in outcomes of these two analyses represents the regulatory benefit of critical habitat. This will, in many instances, lead to different results and different regulatory requirements. Thus, critical habitat designations may provide greater benefits to the recovery of a species than listing alone would do. However, for some species, and in some locations, the outcome of these analyses will be similar, because effects to habitat will often also result in effects to the species.

Public education is often cited as another possible benefit of including lands in critical habitat as it may help focus conservation efforts on areas of high value for certain species. Partnership efforts with the Shoalwater Bay Indian Tribe to conserve the Pacific Coast WSP and other coastal species of concern have resulted in heightened awareness about the species.

The designation of critical habitat for the Pacific Coast WSP may strengthen or reinforce some Federal laws, such as NEPA or Clean Water Act. These laws analyze the potential for projects to significantly affect the environment. Critical habitat may signal the presence of sensitive habitat that could otherwise be missed in the review process for these other environmental law.

Benefits of Exclusion – Shoalwater Bay Tribe

Under Secretarial Order 3206, American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act, we recognize that we must carry

out our responsibilities under the Act in a manner that harmonizes the Federal trust responsibility to tribes and tribal sovereignty while striving to ensure that tribes do not bear a disproportionate burden for the conservation of listed species, so as to avoid or minimize the potential for conflict and confrontation. In accordance with the Presidential memorandums of April 29, 1994, and November 9, 2009, to the maximum extent possible, tribes are the appropriate governmental entities to manage their lands and tribal trust resources, and we are responsible for strengthening government-to-government relationships with tribes. Federal regulation through critical habitat designation may affect the tribal working relationships we now have and which we are strengthening throughout the United States. Maintaining positive working relationships with tribes is key to implementing natural resource programs of mutual interest, including habitat conservation planning efforts. In light of the above-mentioned orders and for a variety of other reasons described in their comment letters and communications, critical habitat designation is typically viewed by tribes as an unwarranted and unwanted intrusion into tribal self-governance.

In the case of the Pacific Coast WSP proposed critical habitat, the Shoalwater Bay Indian Tribe submitted a letter and email (August 31, 2011) requesting to be excluded from the critical habitat designation. In their letter, they stated that the Tribe “continues to demonstrate its desire to protect threatened and/or endangered species through its management and stewardship capabilities” without “externally defined designated critical habitat designations.” The Tribe stated that they wish to make “their own determinations regarding the Reservation and tribal trust resources” and “are pleased that the Tribe has

been able to provide for the Pacific Coast WSP and steps are being taken to continue that effort in the most effective way possible” (letter prepared by Gary Burns, Environmental Program Director and signed by the Tribal Council Chairperson). These communications clearly indicate that designation of tribal lands as critical habitat for Pacific Coast WSP would impact future conservation partnership opportunities with the Tribe. Therefore, a critical habitat designation could potentially damage our relationship with the Shoalwater Bay Indian Tribe. The commitment by the Tribe to restore habitat for this native plant and efforts to control invasive species such as smooth cordgrass (*Spartina alterniflora*) supports their commitment to protect habitat for the Pacific Coast WSP and strengthens the ongoing partnership with the Service. In their comments to the Service on the proposed rule, the Tribe indicated they would use their existing regulations to protect the Pacific Coast WSP and its habitat.

Significant benefits would be realized by forgoing designation of critical habitat on lands managed by the Shoalwater Bay Indian Tribe. These benefits include:

- (1) Continuing and strengthening of our effective relationship with the Tribe to promote conservation of Pacific Coast WSP and its habitat; and
- (2) Allowing continued meaningful collaboration and cooperation in working toward recovering this species, including conservation actions that might not otherwise occur.

The Shoalwater Bay Indian Tribe coordinates regularly with the Washington State Department of Fish and Wildlife on annual surveys for the Pacific Coast WSP and is

partnering with the Service (Willapa National Wildlife Refuge and Ecological Services) to control nonnative/invasive species and restore habitat for the Pacific Coast WSP and other coastal species on the outer beach. Service coordination includes attending meetings with tribal representatives to discuss ongoing projects, management plans, and other issues as that arise.

Because the Tribe is the entity that enforces protective regulations on tribal land, and we have a working relationship with them, exclusion of these lands will yield a significant partnership benefit. We will continue to work cooperatively with the Tribe on efforts to conserve the Pacific Coast WSP. Therefore, excluding these lands from critical habitat provides the significant benefit of maintaining and strengthening our existing conservation partnerships and the potential of fostering new tribal partnerships.

Benefits of Exclusion Outweigh Benefits of Inclusion – Shoalwater Bay Tribe

Based on the above considerations and consistent with the direction provided in section 4(b)(2) of the Act, the Service has determined that the benefits of excluding the above tribal lands outweigh the benefits of including them as critical habitat. This conclusion is based on the following factors. The tribal lands considered for exclusion are currently occupied by Pacific Coast WSPs and will be subject to the consultation requirements of the Act in the future. Although a jeopardy and adverse modification analysis must satisfy two different standards, because any modifications to proposed actions resulting from a section 7 consultation to minimize or avoid impacts to the Pacific

Coast WSP will be habitat-based, it is likely that measures implemented to minimize impacts to the critical habitat will also minimize impacts to the Pacific Coast WSP. Therefore, in the case of the Pacific Coast WSP, the benefits of critical habitat designation are very similar to the benefits of listing, and in some respects would be indistinguishable from the benefits of listing. Few additional benefits are provided by including these tribal lands in this critical habitat designation beyond what will be achieved through the implementation of the existing tribal management or conservation plans. In addition, we expect that the benefit of informing the public of the importance of this area to Pacific Coast WSP conservation would be low. Inclusion of tribal lands will not significantly improve habitat protections for Pacific Coast WSP beyond what is already provided for in the Tribe's own protective policies and practices, discussed above.

Given the cooperative relationship between the Shoalwater Bay Indian Tribe and the Service, and all of the conservation benefits taken together, the additional regulatory and educational benefits of including the tribal lands as critical habitat are relatively small. The designation of critical habitat can serve to educate the public regarding the potential conservation value of an area, but this goal is already being accomplished through the identification of these areas in the tribal management planning, development of tribal Fish and Wildlife Codes, and through their outreach efforts.

Because of the ongoing relationship between the Service and the Shoalwater Bay Indian Tribe through a variety of forums, we find the benefits of these coordination

efforts to be greater than the benefits of applying the Act's section 7 consultations for critical habitat to Federal activities on tribal lands. Based upon our consultations with the Tribes, designation of tribal lands as critical habitat would adversely impact our working relationship and the benefits resulting from this relationship.

In contrast, although the benefits of encouraging tribal participation in resource management planning may be indirect, enthusiastic tribal participation and an atmosphere of cooperation are crucial to the long-term effectiveness of implementing successful endangered species conservation programs. Also, we have concluded that the Tribe's voluntary conservation efforts will provide tangible conservation benefits that will reduce the likelihood of extinction and increase the likelihood for Pacific Coast WSP recovery. Therefore, we assign great weight to these benefits of exclusion. To the extent that there are regulatory benefits of including tribal lands in critical habitat, there would be associated costs that could be avoided by excluding the area from designation. As we expect the regulatory benefits to be low, we likewise give weight to avoidance of those associated costs, as well as the additional transaction costs related to section 7 compliance.

We reviewed and evaluated the benefits of inclusion and the benefits of exclusion of Shoalwater Bay Indian tribal lands as critical habitat for the Pacific Coast WSP. Past, present, and future coordination with the Shoalwater Bay Indian Tribe has provided and will continue to provide Pacific Coast WSP habitat conservation needs on tribal lands, such that there would be no additional benefit from designation of critical habitat.

Further, because any potential impacts to the Pacific Coast WSP from future projects will be addressed through a section 7 consultation with us under the jeopardy standard, critical habitat designation on the Shoalwater Bay Indian Reservation would largely be redundant with the combined benefits of listing and existing tribal regulations and management. Therefore, the benefits of designating critical habitat on tribal lands are not significant.

On the other hand, the benefits of excluding the Shoalwater Bay Indian Reservation from critical habitat are significant. Exclusion of these lands from critical habitat will help preserve and strengthen the conservation partnership we have developed with the Tribe and will foster future partnerships and development of management plans; inclusion, however, would negatively impact our relationships with the Tribe and other tribes. We are committed to working with the Shoalwater Bay Indian Tribe to further the conservation of the Pacific Coast WSP and other endangered and threatened species on the reservation. The Tribe will continue to use their existing regulatory structure to protect Pacific Coast WSP and its habitat. The Tribe continues to provide for indirect conservation of Pacific Coast WSP habitat by implementing conservation measures for other coastal species that use some of the same habitat. Therefore, in consideration of the relevant impact to our partnership and our government-to-government relationship with the Shoalwater Indian Bay Tribe, and the ongoing conservation management practices of the Tribe and our current and future conservation partnerships with them, we determined the significant benefits of exclusion outweigh the benefits of inclusion in the critical habitat designation.

In summary, we find that excluding the Shoalwater Bay Indian tribal lands from this revised final critical habitat will preserve our partnership and may foster future habitat management and species conservation plans with the Tribe and with other tribes now and in the future. These partnership benefits are significant and outweigh the additional regulatory benefits of including these lands in final critical habitat for the Pacific Coast WSP. As a result, the regulatory benefits of critical habitat designation on tribal land would largely be redundant with the combined benefits of listing and existing tribal regulations.

Exclusion Will Not Result in Extinction of the Species — Shoalwater Bay Tribe

We determined that the exclusion of 425 ac (172 ha) of tribal lands from the designation of Pacific Coast WSP critical habitat will not result in extinction of the species. The jeopardy standard of section 7 of the Act and routine implementation of conservation measures through the section 7 process due to Pacific Coast WSP occupancy and protection provided by under Title 23 of the Tribal Environmental Ordinances provide assurances that this species will not go extinct as a result of excluding these lands from the critical habitat designation. Therefore, based on the above discussion the Secretary is exercising his discretion to exclude approximately 425 ac (172 ha) of tribal lands managed by the Shoalwater Bay Indian Tribe from this final critical habitat designation.

Required Determinations

Regulatory Planning and Review—Executive Orders 12866 and 13563

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) will review all significant rules. The OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

Regulatory Flexibility Act (5 U.S.C. 601 et seq.)

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (5 U.S.C. 801 *et seq.*), whenever an agency must publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory

flexibility analysis that describes the effects of the rule on small entities (small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities. In this final rule, we are certifying that the revised critical habitat designation for the Pacific Coast WSP will not have a significant economic impact on a substantial number of small entities. The following discussion explains our rationale.

According to the Small Business Administration, small entities include small organizations, such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; as well as small businesses. Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this rule, as well as types of project modifications that may result. In general, the term “significant

economic impact” is meant to apply to a typical small business firm’s business operations.

To determine if the rule could significantly affect a substantial number of small entities, we consider the number of small entities affected within particular types of economic activities (e.g., development industry, recreation, mining). We apply the “substantial number” test individually to each industry to determine if certification is appropriate. However, the SBREFA does not explicitly define “substantial number” or “significant economic impact.” Consequently, to assess whether a “substantial number” of small entities is affected by this designation, this analysis considers the relative number of small entities likely to be impacted in an area. In some circumstances, especially with critical habitat designations of limited extent, we may aggregate across all industries and consider whether the total number of small entities affected is substantial. In estimating the number of small entities potentially affected, we also consider whether their activities have any Federal involvement.

Designation of critical habitat only affects activities authorized, funded, or carried out by Federal agencies. Some kinds of activities are unlikely to have any Federal involvement and so will not be affected by critical habitat designation. In areas where the species is present, Federal agencies already are required to consult with us under section 7 of the Act on activities they authorize, fund, or carry out that may affect the Pacific Coast WSP. Federal agencies also must consult with us if their activities may affect critical habitat. Designation of critical habitat, therefore, could result in an additional

economic impact on small entities due to the requirement to reinitiate consultation for ongoing Federal activities (see *Application of the “Adverse Modification Standard”* section).

In our final economic analysis of the critical habitat designation, we evaluated the potential economic effects on small business entities resulting from conservation actions related to the listing of the Pacific Coast WSP and the designation of critical habitat. The analysis is based on the estimated impacts associated with the rulemaking as described in Chapters 1 through 5 and Appendix A of the analysis and evaluates the potential for economic impacts related to: (1) Recreation; (2) commercial and residential development; (3) gravel mining; (4) military activities; and (5) habitat and species management (IEc 2012).

In the FEA of the revised proposed critical habitat, we evaluate the potential economic effects on small business entities resulting from implementation of conservation actions related to the proposed revisions to critical habitat for the Pacific Coast WSP. The FEA is based on the estimated incremental impacts associated with the proposed rulemaking as described in Chapter 4. The FEA evaluates the potential for direct economic impacts related to activity categories identified above as well as for indirect impacts related to CEQA, uncertainty, and delay. The FEA concludes that the incremental impacts resulting from this rulemaking that may be borne by small businesses will be associated only with recreation. Incremental impacts are either not

expected for the other types of activities considered or, if expected, will not be borne by small entities.

As discussed in Appendix A of the FEA, Exhibit A-1 describes the non-Federal entities that may be affected by critical habitat designation and assesses whether they are considered small entities under the RFA. The State of California (CDPR), Santa Barbara County, Monterey County, Santa Cruz County, and City of Coronado will participate in the future consultations with the Service. Of these entities, only the City of Coronado meets the RFA's definition of a small governmental jurisdiction. Third-party administrative costs for the City of Coronado are expected to be \$818 in 2012, assuming a 7 percent discount rate. This impact represents less than 0.01 percent of the City's annual revenues of \$40.3 million. In addition, the FEA has identified the potential for critical habitat to possibly indirectly influence future litigation or State review of environmental permits within Oceano Dunes SVRA (Unit CA 31) and the two development projects in Sand City (Unit CA 22). Critical habitat may indirectly serve as a lever for future litigation aimed at reducing or eliminating OHV-recreation on the beach. Such action would indirectly affect recreators and businesses in the local community.

In summary, we considered whether this designation will result in a significant economic effect on a substantial number of small entities. Based on the above reasoning and currently available information, we concluded that this rule would not result in a significant economic impact on a substantial number of small entities. Therefore, we are

certifying that the designation of critical habitat for Pacific Coast WSP will not have a significant economic impact on a substantial number of small entities, and a regulatory flexibility analysis is not required.

Energy Supply, Distribution, or Use – Executive Order 13211

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. OMB has provided guidance for implementing this Executive Order that outlines nine outcomes that may constitute “a significant adverse effect” when compared to not taking the regulatory action under consideration.

The economic analysis finds that none of these criteria are relevant to this analysis. Thus, based on information in the economic analysis, energy-related impacts associated with Pacific Coast WSP conservation activities within critical habitat are not expected. As such, the designation of critical habitat is not expected to significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following findings:

(1) This rule will not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of

Federal assistance; or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because it will not produce a Federal mandate of \$100 million or greater in any year; that is, it is not a “significant regulatory action” under the Unfunded Mandates Reform Act. The FEA concludes incremental impacts may occur due to project modifications that may need to be made for real estate development; however, these are not expected to significantly affect small governments. The City of Coronado has been identified as the only small government affected by the designation, and the total

estimated cost associated with the designation is \$818 in 2012, assuming a 7 percent discount rate. This impact represents less than 0.01 percent of the City's annual revenues of \$40.3 million. Consequently, we do not believe that this revised final critical habitat designation will significantly or uniquely affect small government entities. As such, a Small Government Agency Plan is not required.

Takings—Executive Order 12630

In accordance with E.O. 12630 (“Government Actions and Interference with Constitutionally Protected Private Property Rights”), we have analyzed the potential takings implications of designating revised critical habitat for the Pacific Coast WSP in a takings implications assessment. As discussed above, the designation of critical habitat affects only Federal actions. Although private parties that receive Federal funding, assistance, or require approval or authorization from a Federal agency for an action may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. The FEA has identified that all the incremental costs are entirely administrative in nature. No incremental project modifications are anticipated to result from section 7 consultations with the majority of consultation costs being incurred by the Service and other Federal action agencies. Of the approximately 76 anticipated consultations over the 20-year period of analysis, only nine will involve third parties. The takings implications assessment concludes that this revised designation of critical habitat for the Pacific Coast WSP does not pose significant takings implications for lands within or affected by the

designation.

Federalism—Executive Order 13132

In accordance with Executive Order 13132 (Federalism), this rule does not have significant Federalism effects. A federalism impact summary statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of, this revised final critical habitat designation with appropriate State resource agencies in California, Oregon, and Washington. We did receive comments from State Park managers in both Oregon and California. The ORPD requested that lands under their approved HCP be excluded from designation. The CDPR commented that portions of Oceano Dunes SVRA should be excluded from designation; however, that park unit does not have an approved HCP or other management plan. The designation may have some benefit to these governments in that the areas that contain the physical or biological features essential to the conservation of the species are more clearly defined, and the elements of the features of the habitat necessary to the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist local governments in long-range planning (rather than having them wait for case-by-case section 7 consultations to occur).

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section

7(a)(2) would be required. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

Civil Justice Reform – Executive Order 12988

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and that it meets the applicable standards as set forth in sections 3(a) and 3(b)(2) of the Order. We are designating revised critical habitat in accordance with the provisions of the Act. This revised final rule uses standard property descriptions in the preamble's critical habitat unit descriptions and identifies the elements of physical or biological features essential to the conservation of the Pacific Coast WSP within the designated areas to assist the public in understanding the habitat needs of the species.

Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

This rule does not contain any new collections of information that require approval by OMB under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*). This rule will not impose recordkeeping or reporting requirements on State or local governments, individuals, businesses, or organizations. An agency may not conduct or

sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number.

National Environmental Policy Act (NEPA)(42 U.S.C. 4321 et. seq.)

It is our position that, outside the jurisdiction of the Circuit Court of Appeals of the United States for the Tenth Circuit, we do not need to prepare environmental analyses as defined by NEPA (42 U.S.C. 4321 *et seq.*) in connection with designating critical habitat under the Act. We published a notice outlining our reasons for this determination in the **Federal Register** on October 25, 1983 (48 FR 49244). This assertion was upheld by the Court of Appeals of the United States for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied, 516 U.S. 1042 (1996)).

Government-to-Government Relationship with Tribes

In accordance with the President's memorandum of April 29, 1994, Government-to-Government Relations with Native American Tribal Governments (59 FR 22951), E.O. 13175, and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with tribes in developing programs for healthy ecosystems, to acknowledge that

tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to tribes.

In the proposed revisions to critical habitat published in the **Federal Register** on March 22, 2011 (76 FR 16046), we proposed to designate 1,121 ac in subunit WA 3B Shoalwater/Graveyard Spit, of which we claimed approximately 336 ac (136 ha) to be within the Shoalwater Bay Tribal lands. After further review and additional information provided by the Shoalwater Bay Tribe, we have identified approximately 425 ac (172 ha) belonging to the Tribe and meeting the definition of critical habitat. We worked directly with the Tribe to determine economic and other burdens expected to result from critical habitat designation on tribal lands, and as a result of information exchanged, the Secretary is exercising his discretion to exclude all Shoalwater Bay Tribal lands meeting the definition of critical habitat for the Pacific Coast WSP from this final revised designation under section 4(b)(2) of the Act (see **Exclusions Under Section 4(b)(2) of the Act—Tribal Lands** section above).

References Cited

A complete list of all references cited is available on the Internet at <http://www.regulations.gov> and upon request from the Field Supervisor, Arcata Fish and Wildlife Office (see **ADDRESSES**).

Authors

The primary authors of this rule are staff of the Arcata Fish and Wildlife Office and Pacific Southwest Regional Office.

List of Subjects in 50 CFR Part 17

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping requirements, Transportation.

Regulation Promulgation

Accordingly, we amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

PART 17— [AMENDED]

1. The authority citation for part 17 continues to read as follows:

Authority: 16 U.S.C. 1361–1407; 16 U.S.C. 1531–1544; 16 U.S.C. 4201–4245; Pub. L. 99-625, 100 Stat. 3500; unless otherwise noted.

2. Amend §17.11(h) by revising the entry for “Plover, western snowy” under BIRDS to read as follows:

§ 17.11 Endangered and threatened wildlife.

* * * * *

(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						

BIRDS							

Plover, western snowy (Pacific Coast population DPS)	<i>Charadrius nivosus nivosus</i>	Pacific Coast population DPS— U.S.A. (CA, , OR, WA), Mexico	Pacific Coast population DPS— U.S.A. (CA, OR, WA), Mexico (within 50 miles of Pacific coast)	T	493	17.95(b)	NA

3. Amend § 17.95(b) by revising the entry for “Western Snowy Plover (*Charadrius alexandrinus nivosus*)—Pacific Coast Population” to read as follows:

§ 17.95 Critical habitat—fish and wildlife.

* * * * *

(b) Birds.

* * * * *

Western Snowy Plover (*Charadrius nivosus nivosus*)—Pacific Coast Population

(1) Critical habitat units are depicted for: Washington—Grays Harbor and Pacific Counties; Oregon—Clatsop, Tillamook, Lane, Douglas, Coos, and Curry Counties; and California—Del Norte, Humboldt, Mendocino, Marin, Napa, Alameda, San Mateo, Santa Cruz, Monterey, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Counties, on the maps below.

(2) Within these areas, the primary constituent elements of the physical or biological features essential to the conservation of the Pacific Coast population of the western snowy plover are sandy beaches, dune systems immediately inland of an active beach face, salt flats, mud flats, seasonally exposed gravel bars, artificial salt ponds and

adjoining levees, and dredge spoil sites, with:

(i) Areas that are below heavily vegetated areas or developed areas and above the daily high tides;

(ii) Shoreline habitat areas for feeding, with no or very sparse vegetation, that are between the annual low tide or low-water flow and annual high tide or high-water flow, subject to inundation but not constantly under water, that support small invertebrates, such as crabs, worms, flies, beetles, spiders, sand hoppers, clams, and ostracods, that are essential food sources;

(iii) Surf- or water-deposited organic debris, such as seaweed (including kelp and eelgrass) or driftwood located on open substrates that supports and attracts small invertebrates described in paragraph (ii) of this entry for food, and provides cover or shelter from predators and weather, and assists in avoidance of detection (crypsis) for nests, chicks, and incubating adults; and

(iv) Minimal disturbance from the presence of humans, pets, vehicles, or human-attracted predators which provide relatively undisturbed areas for individual and population growth and for normal behavior.

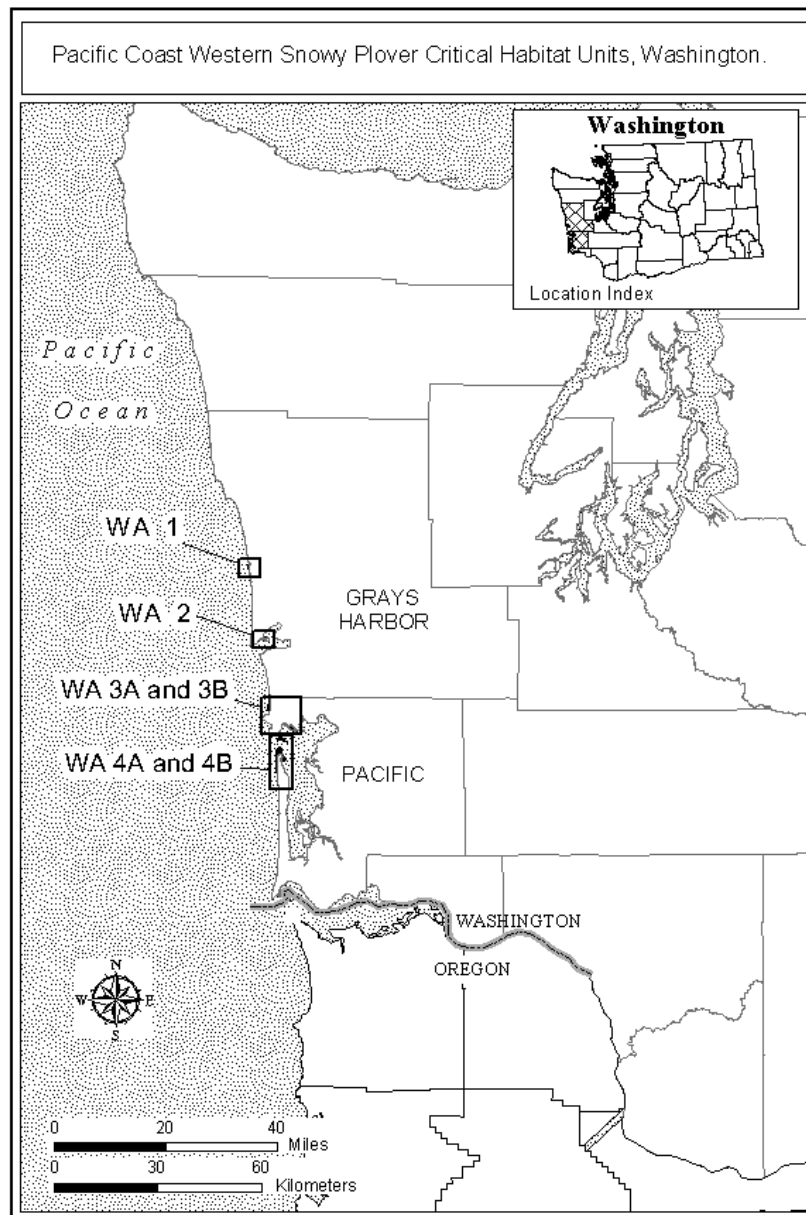
(3) Critical habitat does not include manmade structures (such as buildings, roads, paved areas, boat ramps, and other developed areas) and the land on which such structures are directly located and existing within the legal boundaries on the effective date of this rule.

(4) Critical habitat map units. Data layers defining map units were created on a

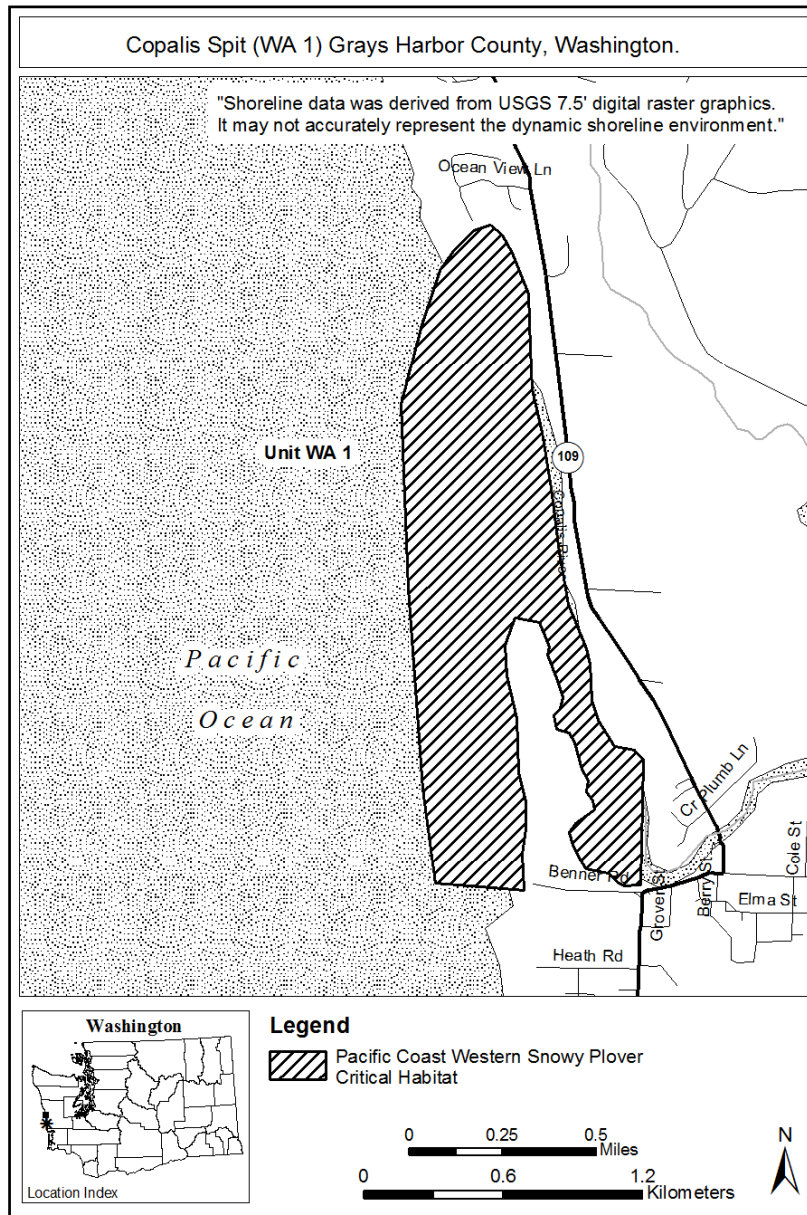
base of USGS digital ortho-photo quarter-quadrangles, and critical habitat units were then mapped using Universal Transverse Mercator (UTM) Zone 10N and 11N coordinates.

(5) The coordinates for these maps are available on the Internet at <http://www.regulations.gov> at Docket No. FWS–R8–ES–2010–0070, at <http://www.fws.gov/arcata/>, or at the Arcata Fish and Wildlife Office, 1655 Heindon Road, Arcata, CA 95521.

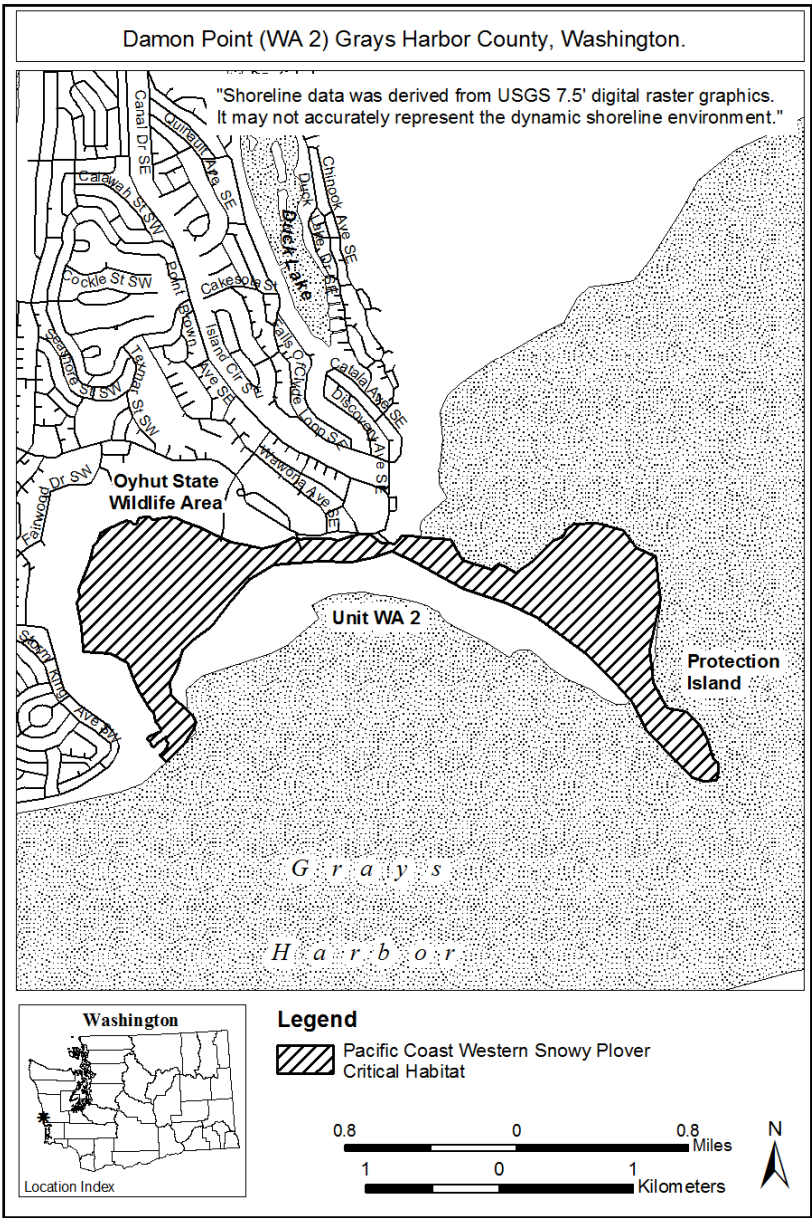
(6) Index map of critical habitat units for the Pacific Coast western snowy plover (*Charadrius nivosus nivosus*) in Washington follows:



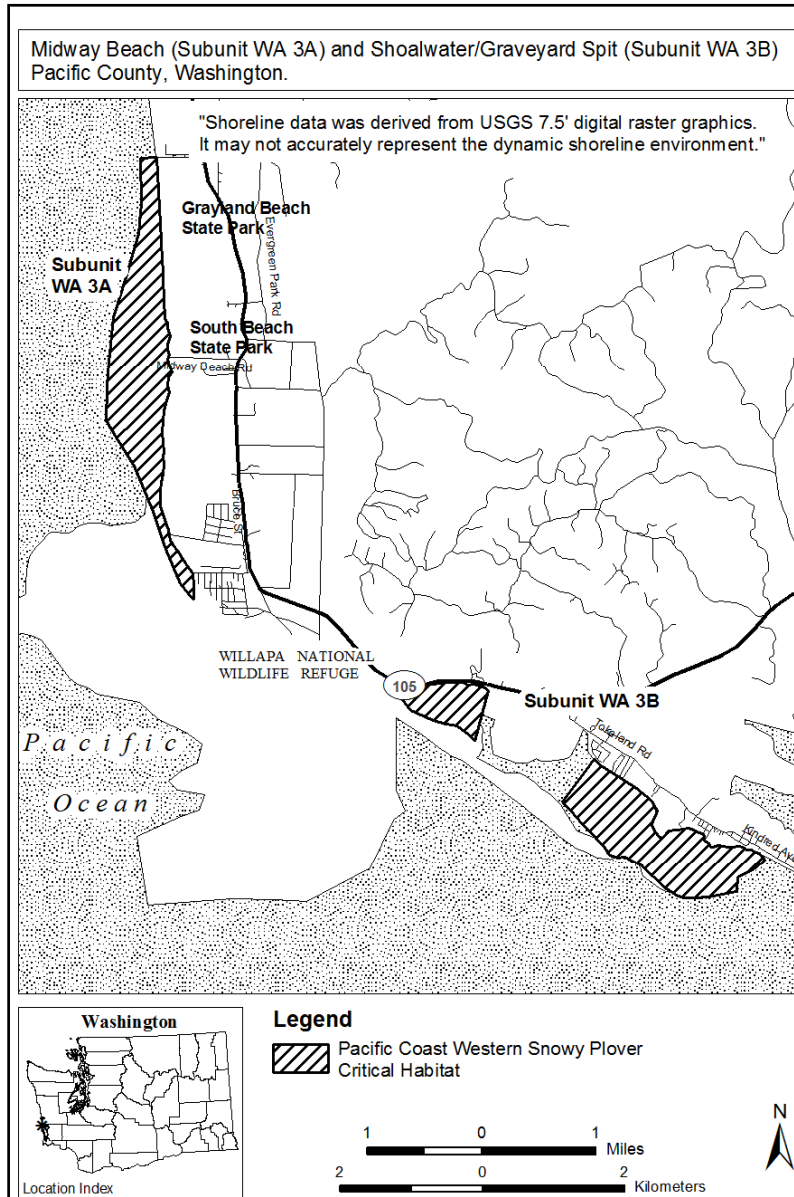
(7) Unit WA 1: Copalis Spit, Grays Harbor County, Washington. Map follows:



(8) Unit WA 2: Damon Point, Grays Harbor County, Washington. Map follows:



(9) Subunit WA 3A: Midway Beach, Pacific County, Washington. Map of Subunits WA 3A and WA 3B follows.

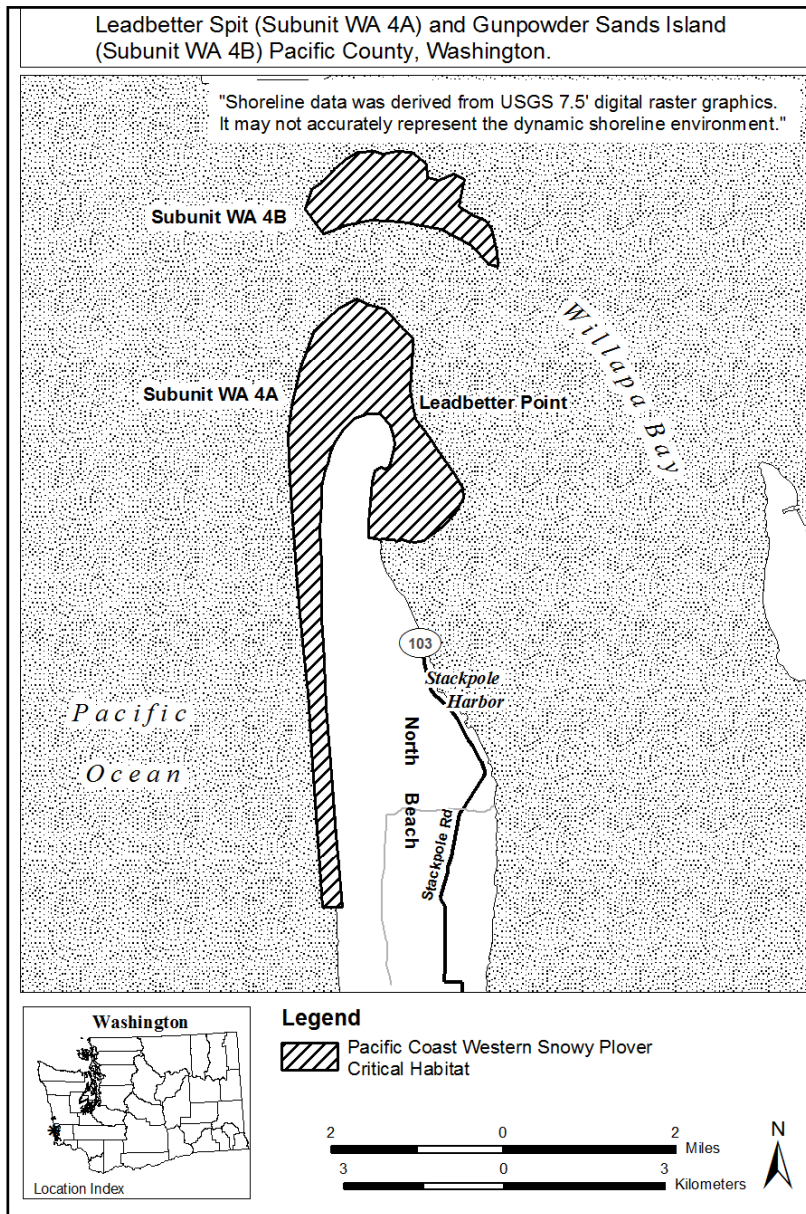


(10) Subunit WA 3B: Shoalwater/Graveyard Spit, Pacific County, Washington.

Map of Subunits WA 3A and WA 3B is provided at paragraph (8) of this entry.

(11) Subunit WA 4A: Leadbetter Spit, Pacific County, Washington. Map of

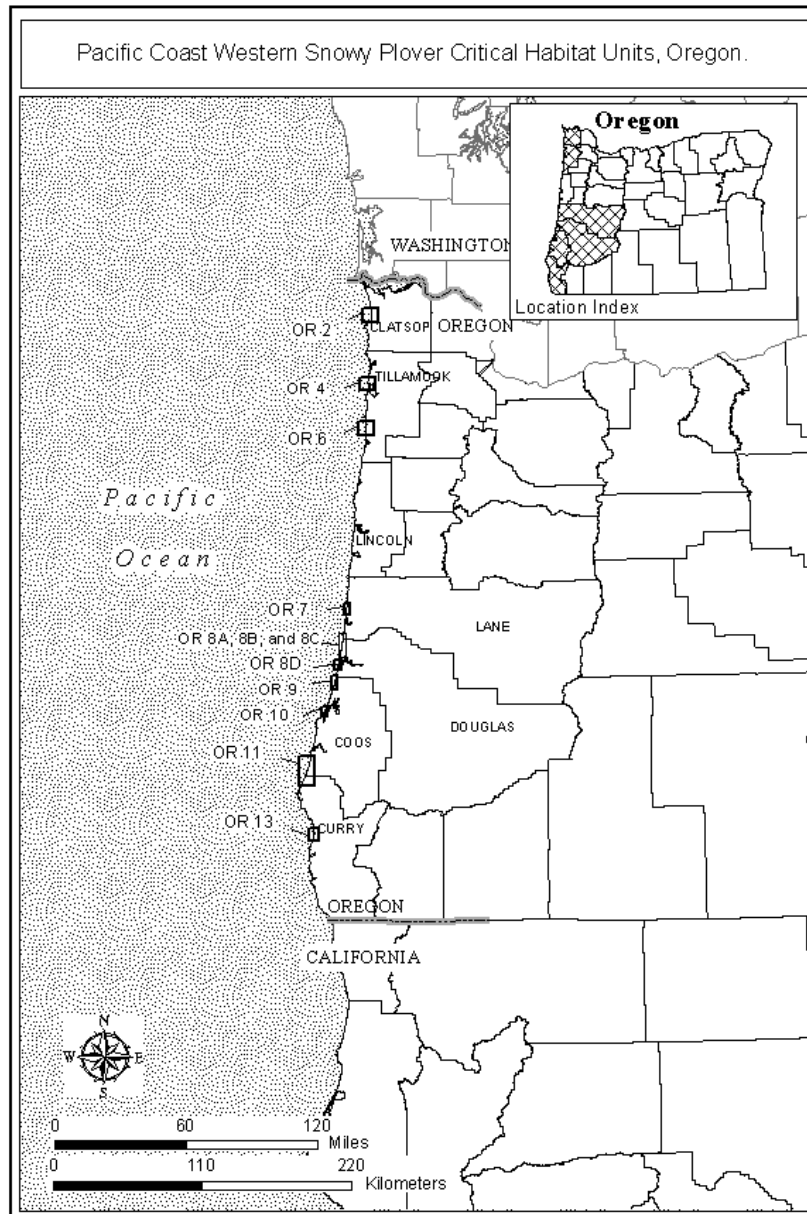
Subunits WA 4A and WA 4B follows.



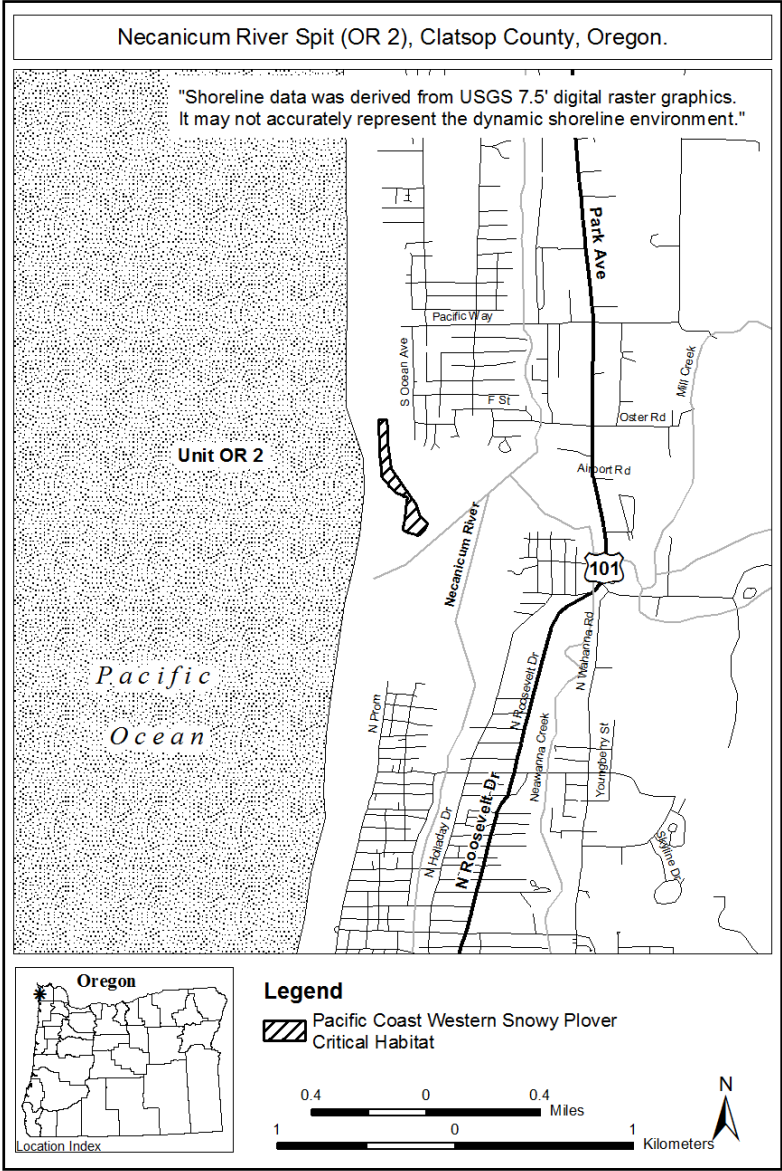
(12) Subunit WA 4B: Gunpowder Sands Island, Pacific County, Washington.

Map of Subunits WA 4A and WA 4B is provided at paragraph (11) of this entry.

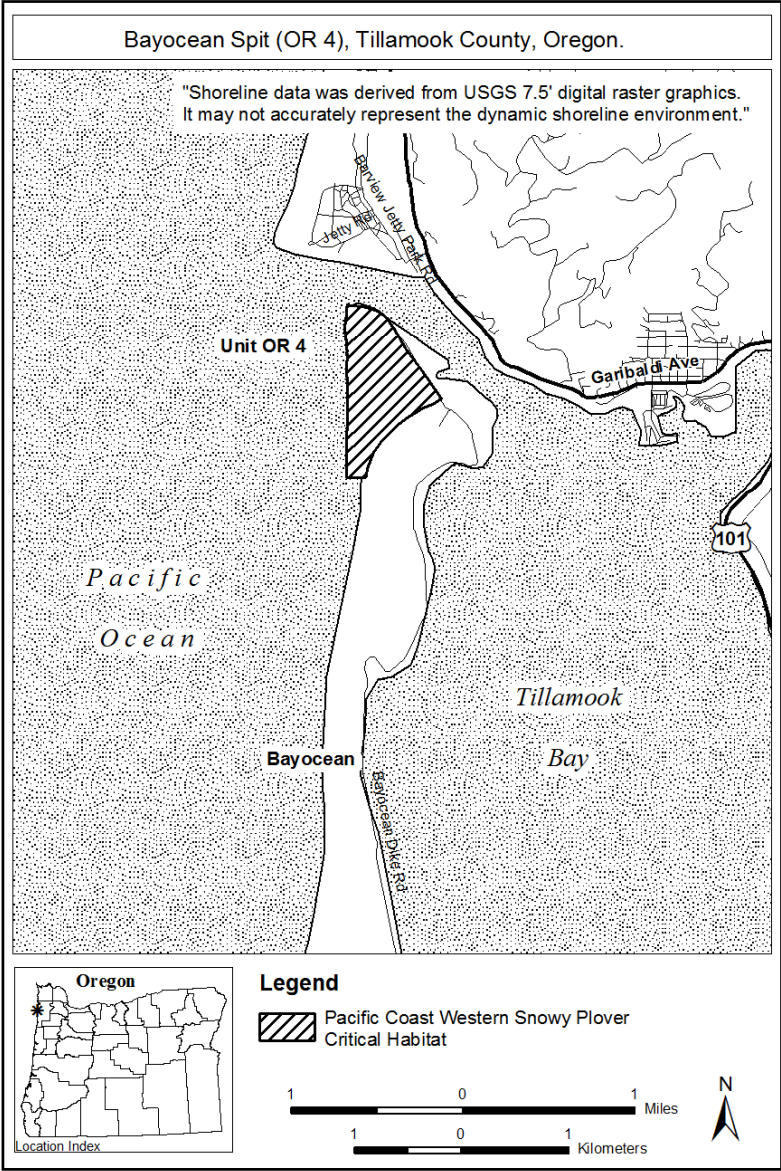
(13) Index map of critical habitat units for the Pacific Coast western snowy plover (*Charadrius nivosus nivosus*) in Oregon follows:



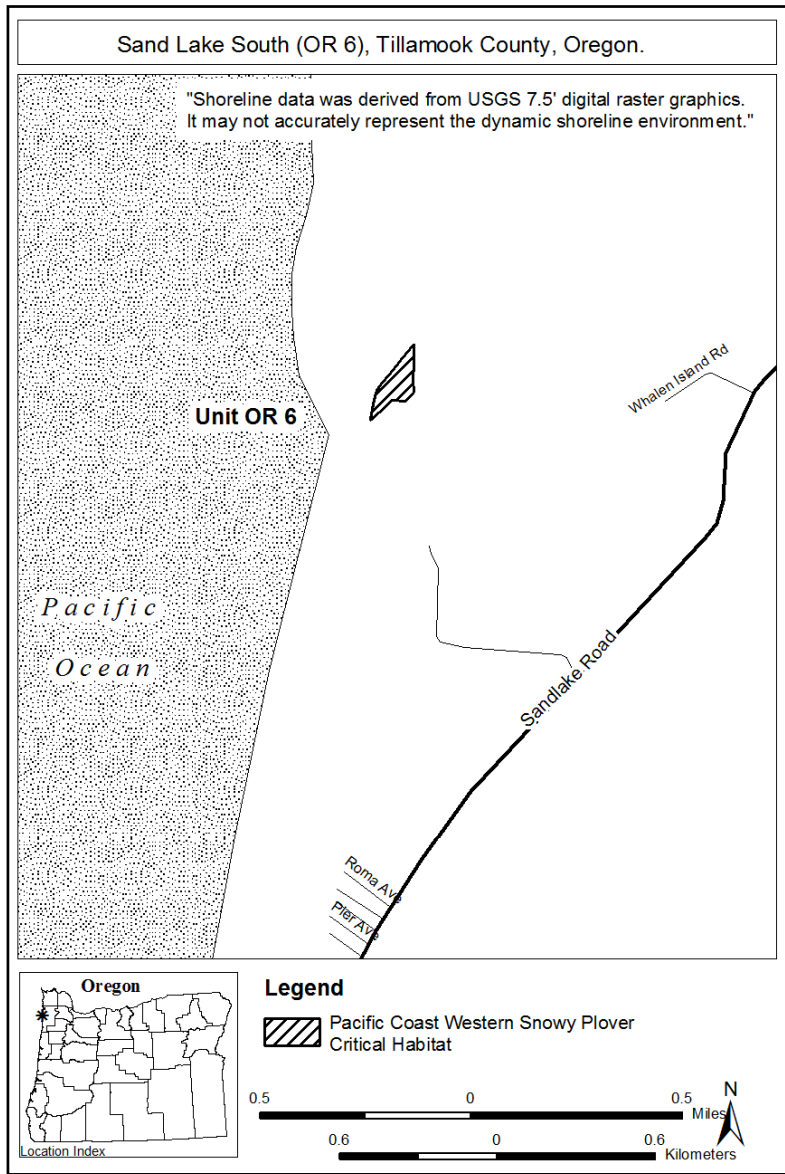
(14) Unit OR 2: Necanicum River Spit, Clatsop County, Oregon. Map follows:



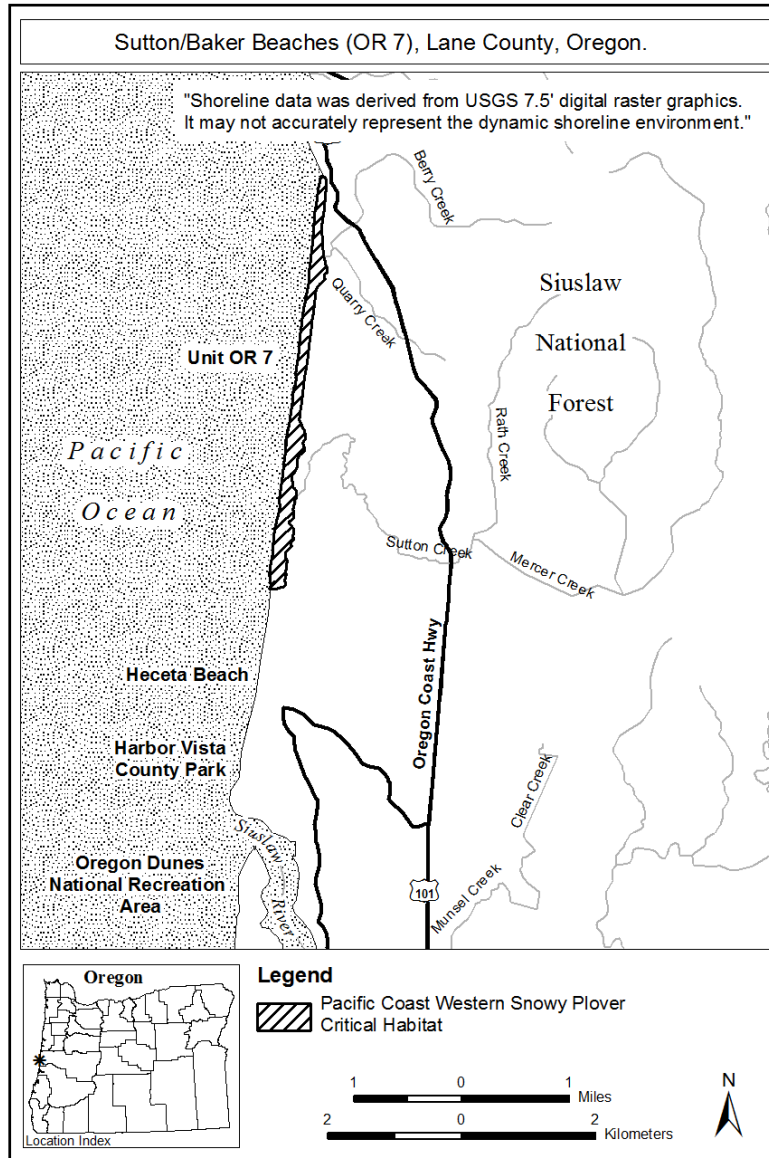
(15) Unit OR 4: Bayocean Spit, Tillamook County, Oregon. Map follows:



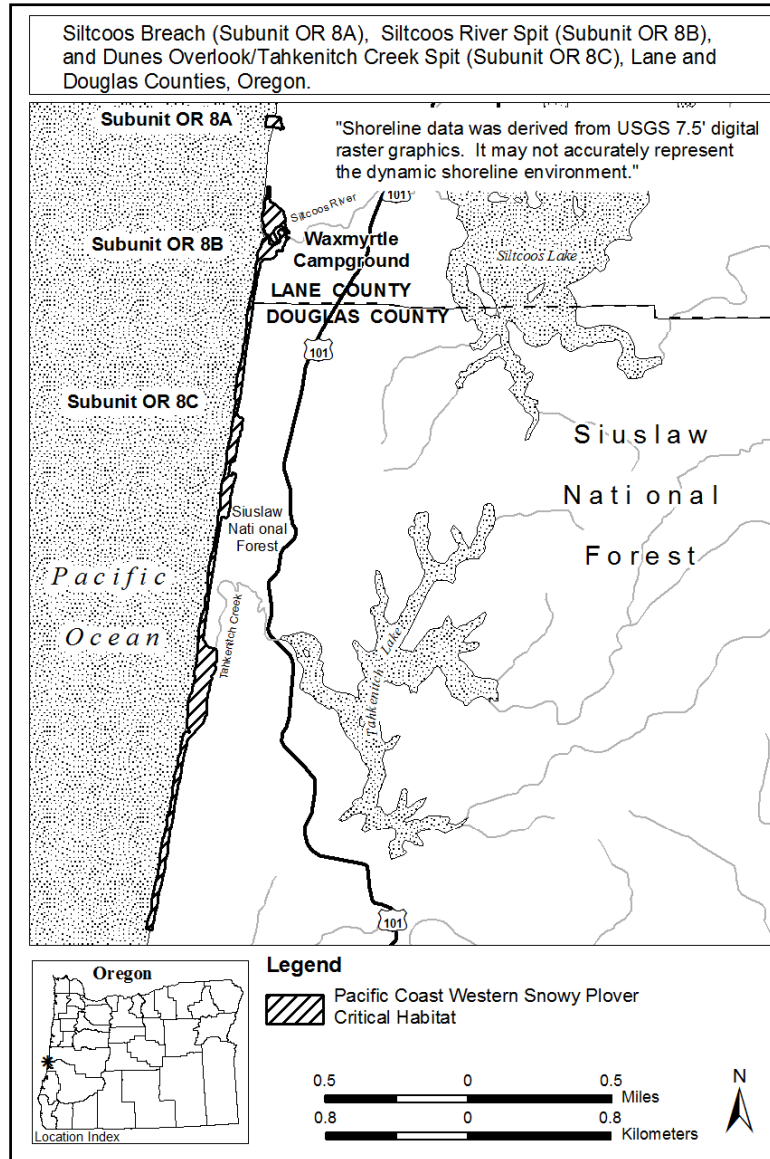
(16) Unit OR 6: Sand Lake South, Tillamook County, Oregon. Map follows:



(17) Unit OR 7: Sutton/Baker Beaches, Lane County, Oregon. Map follows:



(18) Subunit OR 8A: Siltcoos Breach, Lane County, Oregon. Map of Subunits OR 8A, OR 8B, and OR 8C follows:



(19) Subunit OR 8B: Siltcoos River Spit, Douglas and Lane Counties, Oregon.

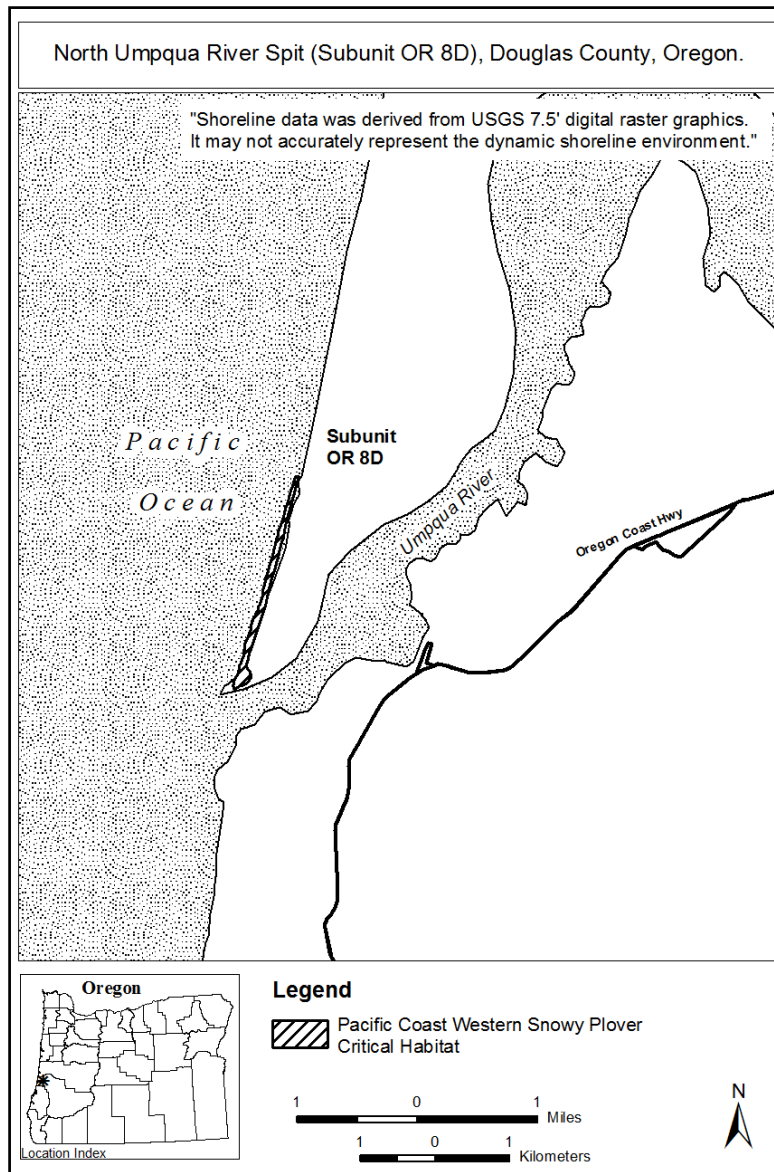
Map of Subunits OR 8A, OR 8B, and OR 8C is provided at paragraph (18) of this entry.

(20) Subunit OR 8C: Dunes Overlook Tahkenitch Creek Spit, Douglas County,

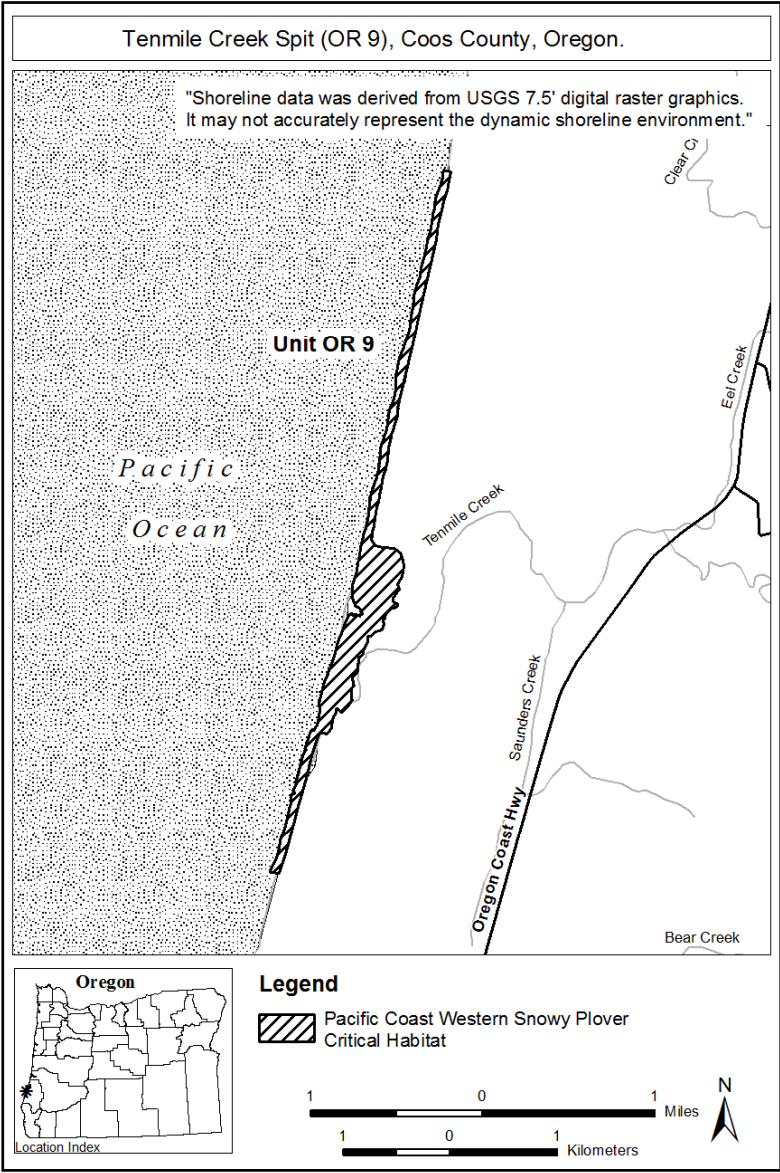
Oregon. Map of Subunits OR 8A, OR 8B, and OR 8C is provided at paragraph (18) of this entry.

(21) Subunit OR 8D: North Umpqua River Spit, Douglas County, Oregon. Map

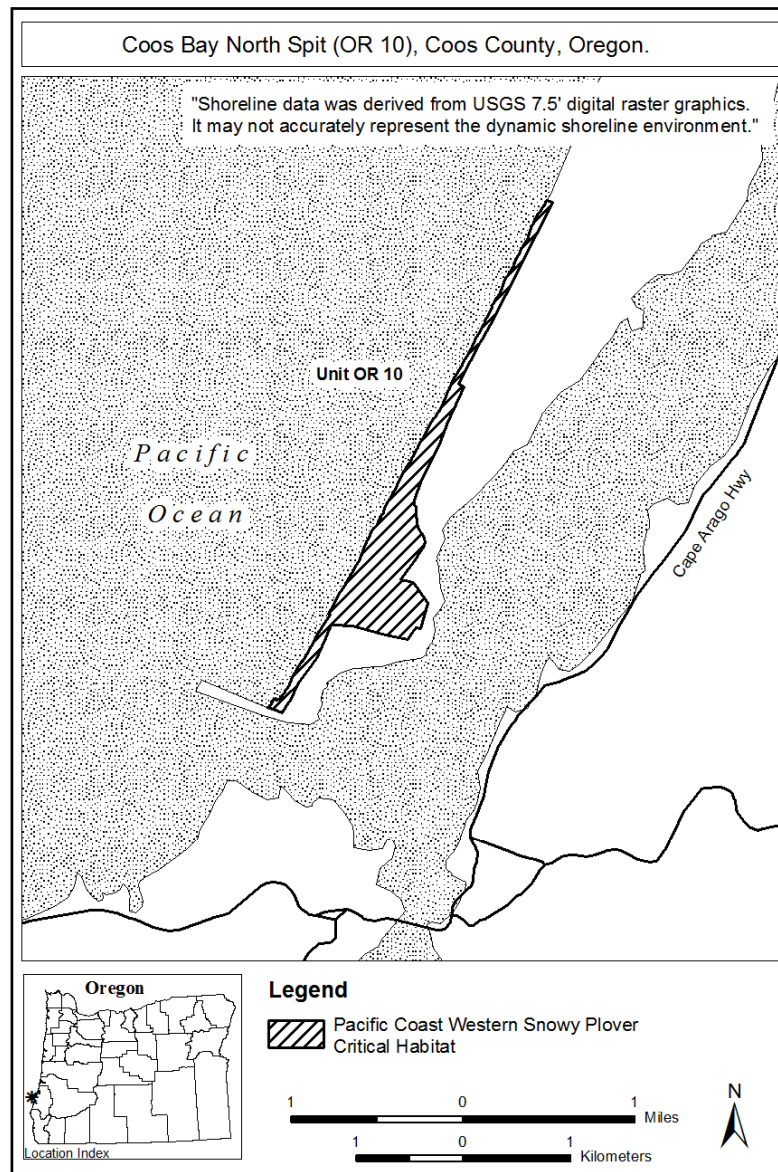
follows:



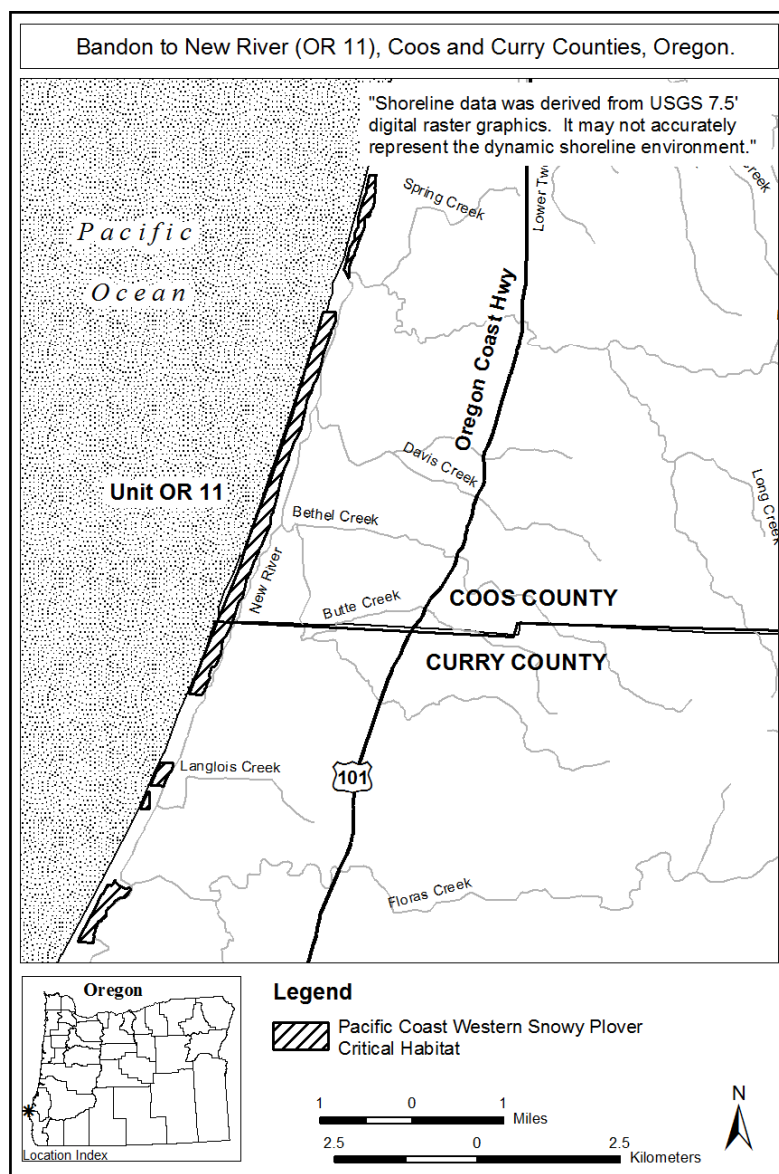
(22) Unit OR 9: Tenmile Creek Spit, Coos County, Oregon. Map follows:



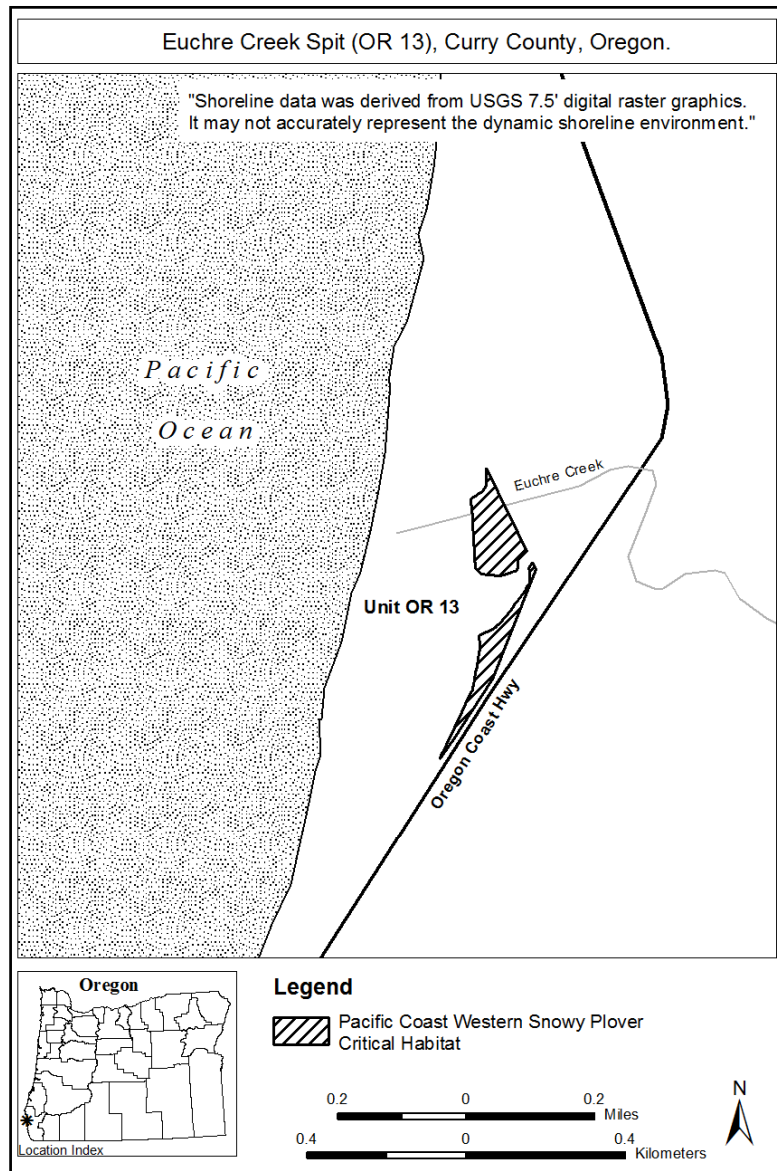
(23) Unit OR 10: Coos Bay North Spit, Coos County, Oregon. Map follows:



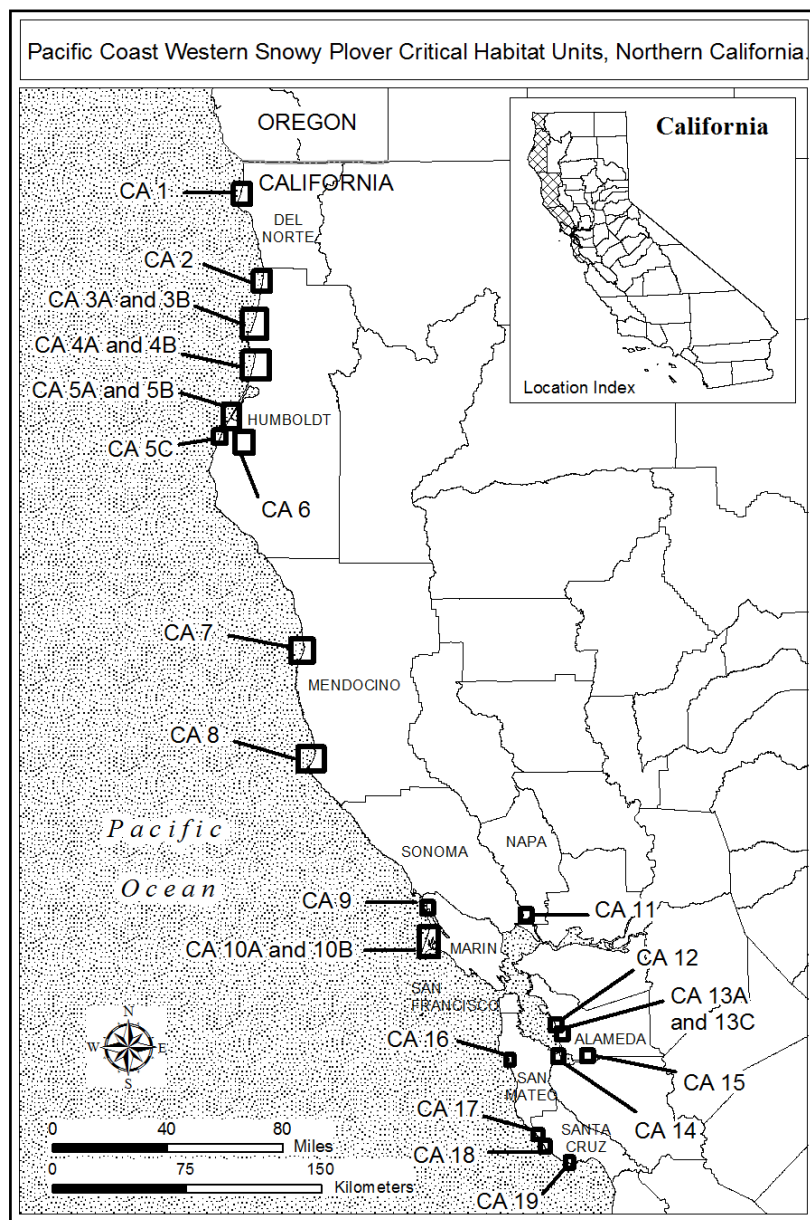
(24) Unit OR 11: Bandon to New River, Coos and Curry Counties, Oregon. Map follows:



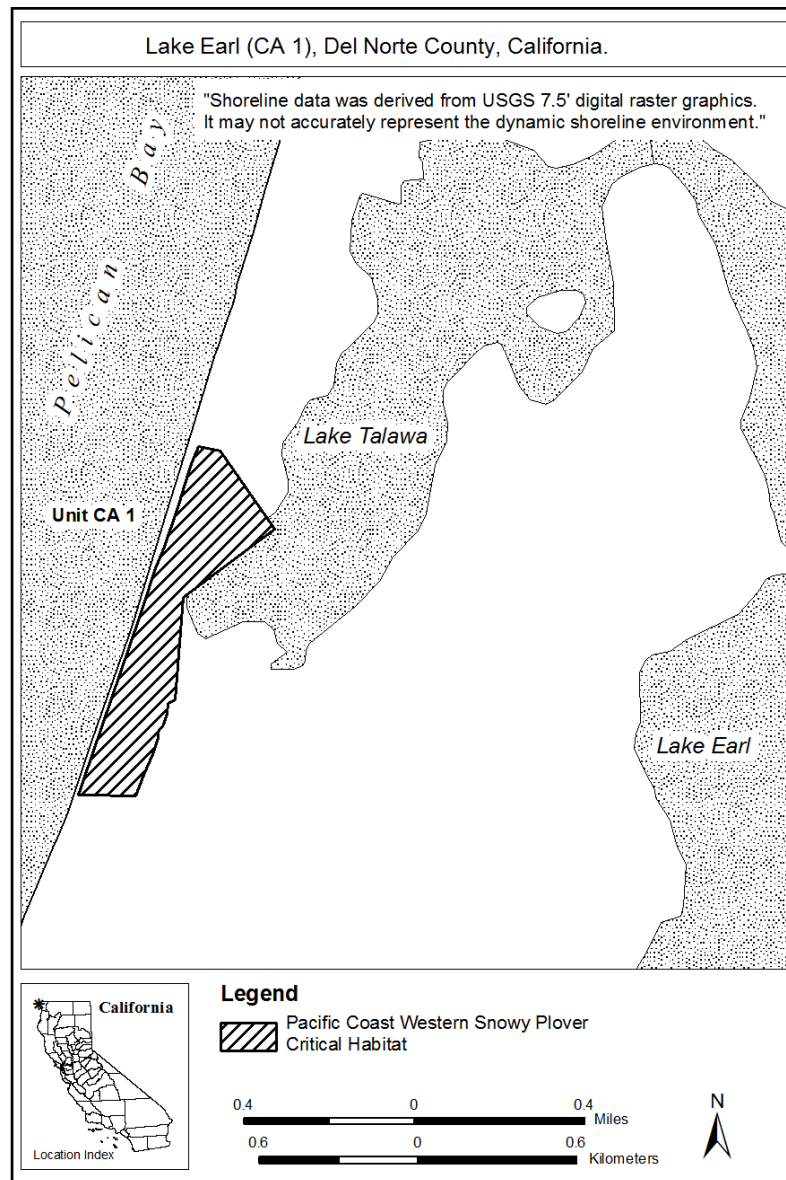
(25) Unit OR 13: Euchre Creek Spit, Curry County, Oregon. Map follows:



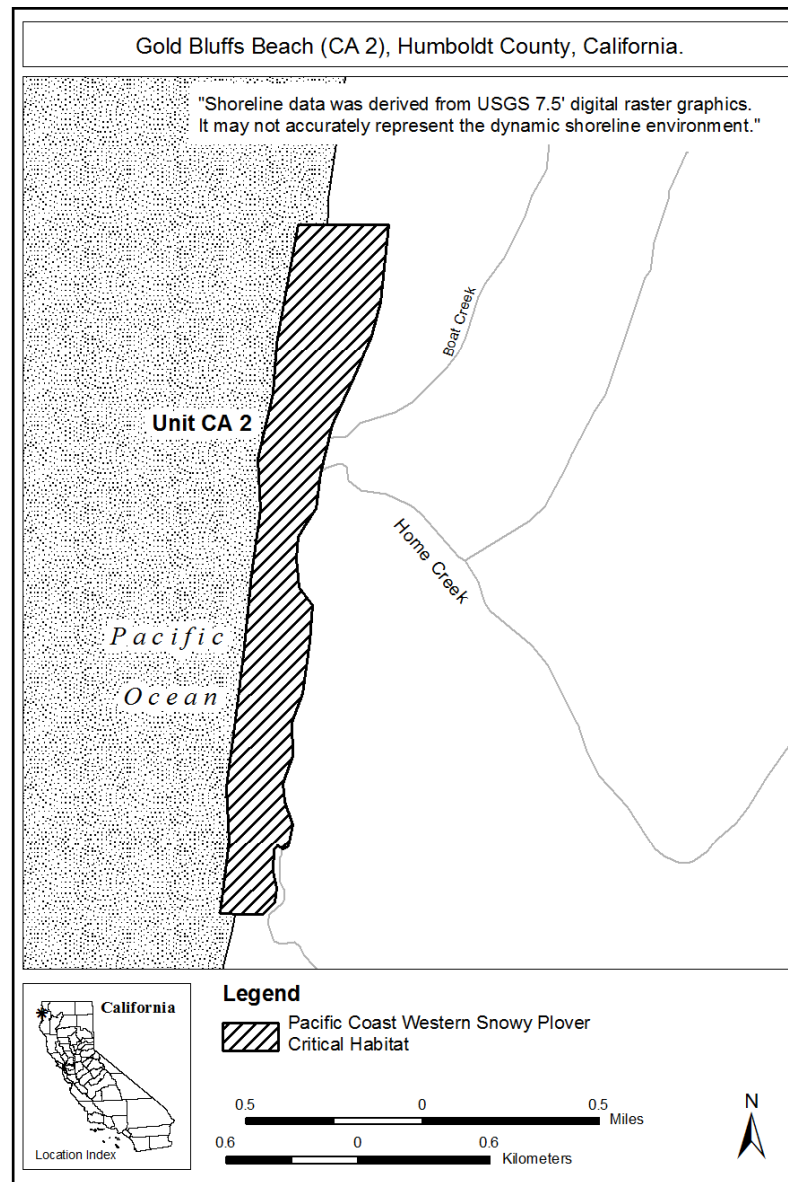
(26) Index map of critical habitat units for the Pacific Coast western snowy plover (*Charadrius nivosus nivosus*) in Northern California follows:



(27) Unit CA 1: Lake Earl, Del Norte County, California. Map follows:

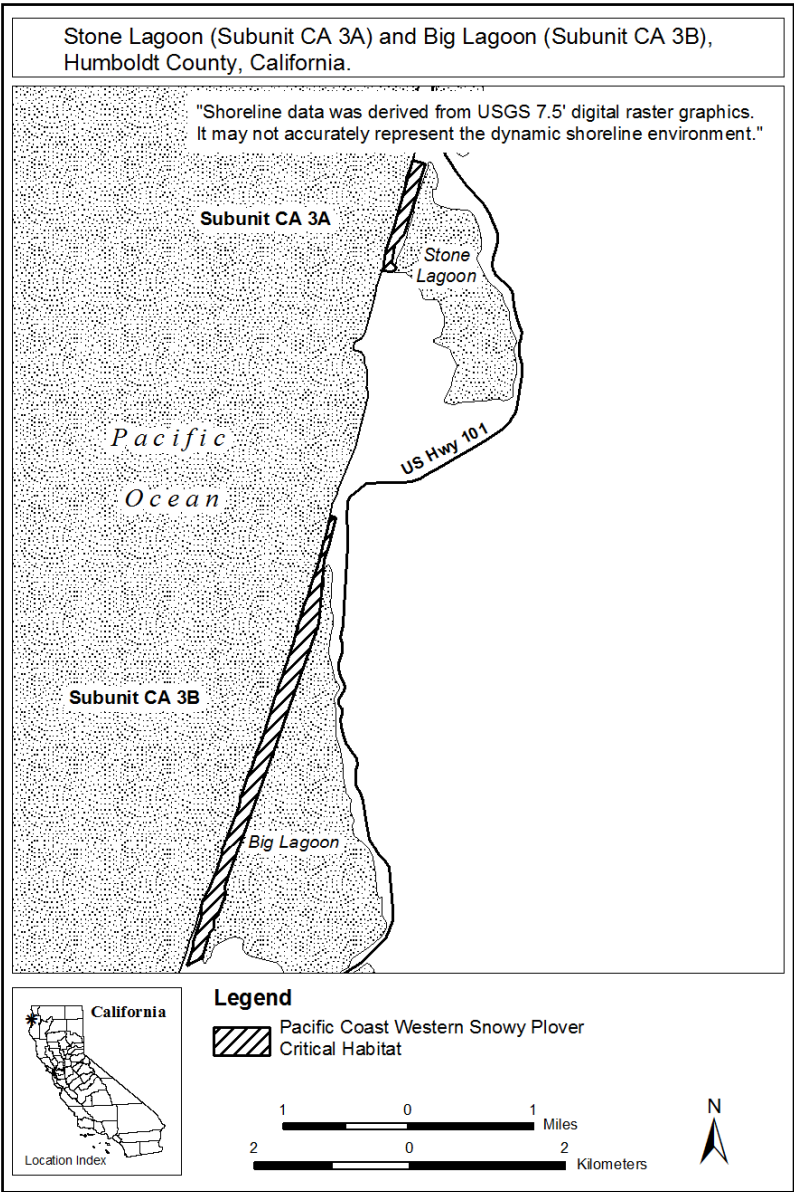


(28) Unit CA 2: Gold Bluffs Beach, Humboldt County, California. Map follows:



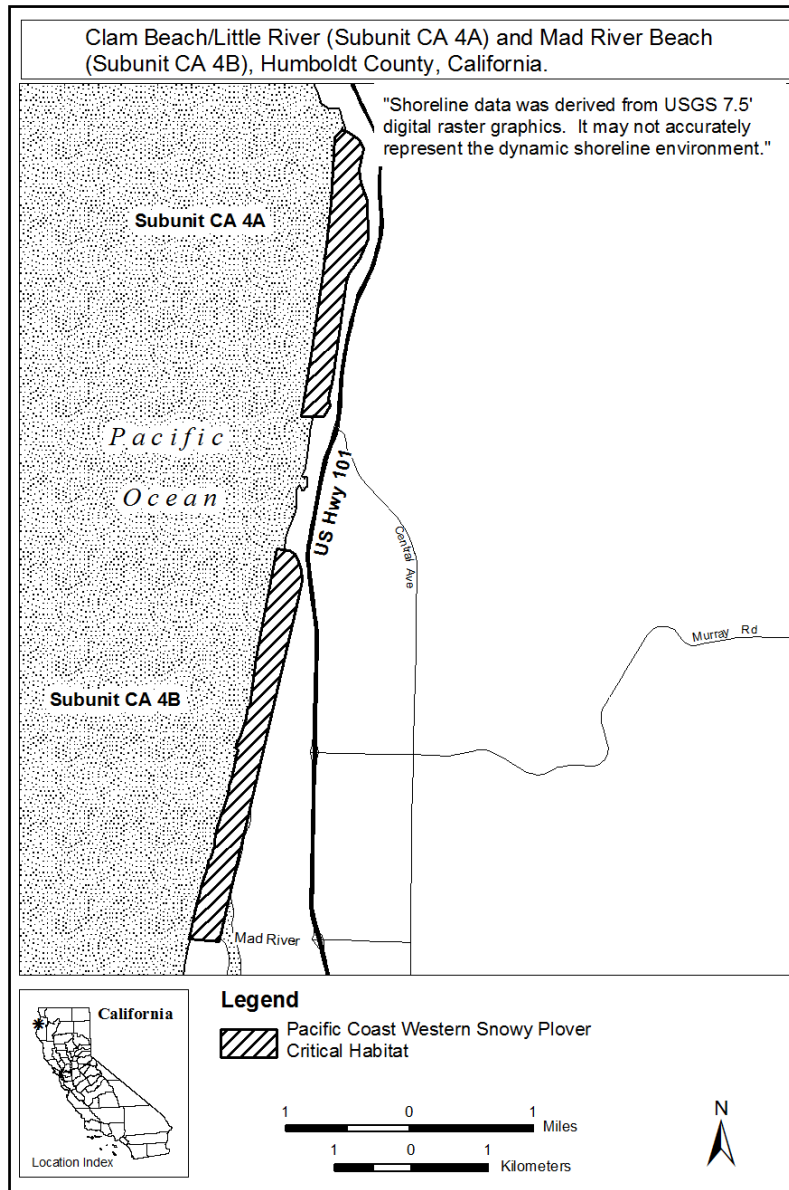
(29) Subunit CA 3A: Stone Lagoon, Humboldt County, California. Map of

Subunits CA 3A and CA 3B follows:



(30) Subunit CA 3B: Big Lagoon, Humboldt County, California. Map of Subunits CA 3A and CA 3B is provided at paragraph 29 of this entry.

(31) Subunit CA 4A: Clam Beach/Little River, Humboldt County, California. Map of Subunits CA 4A and CA 4B follows:

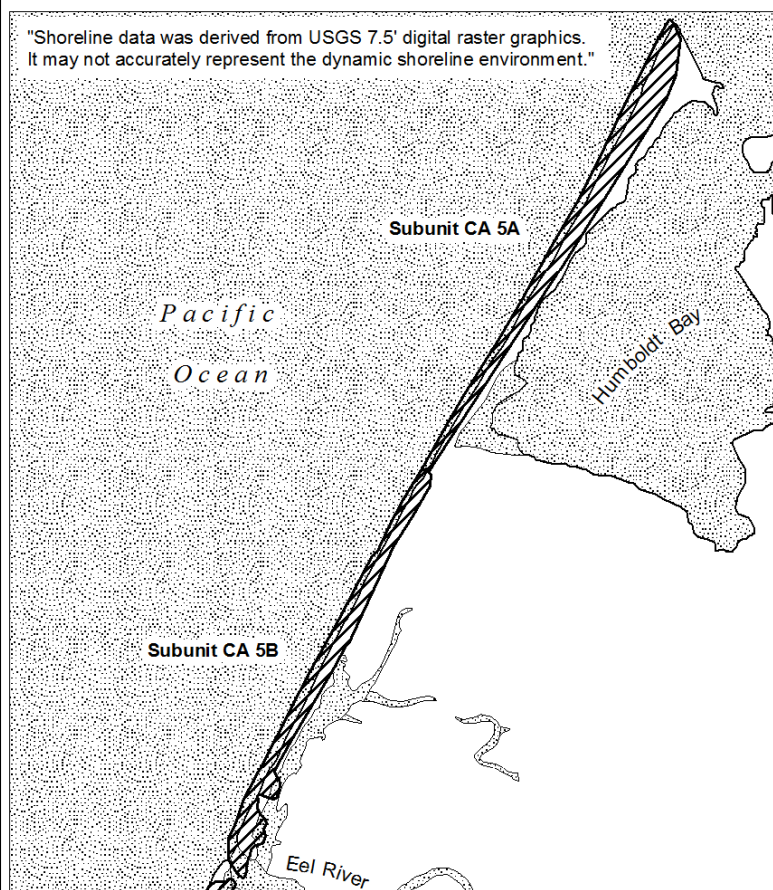


(32) Subunit CA 4B: Mad River Beach, Humboldt County, California. Map of Subunits CA 4A and CA 4B is provided at paragraph 31 of this entry.

(33) Subunit CA 5A: Humboldt Bay South Spit, Humboldt County, California.
Map of Subunit CA 5A and CA 5B follows:

Humboldt Bay South Spit (Subunit CA 5A) and Eel River North Spit and Beach (Subunit CA 5B), Humboldt County, California.

"Shoreline data was derived from USGS 7.5' digital raster graphics. It may not accurately represent the dynamic shoreline environment."



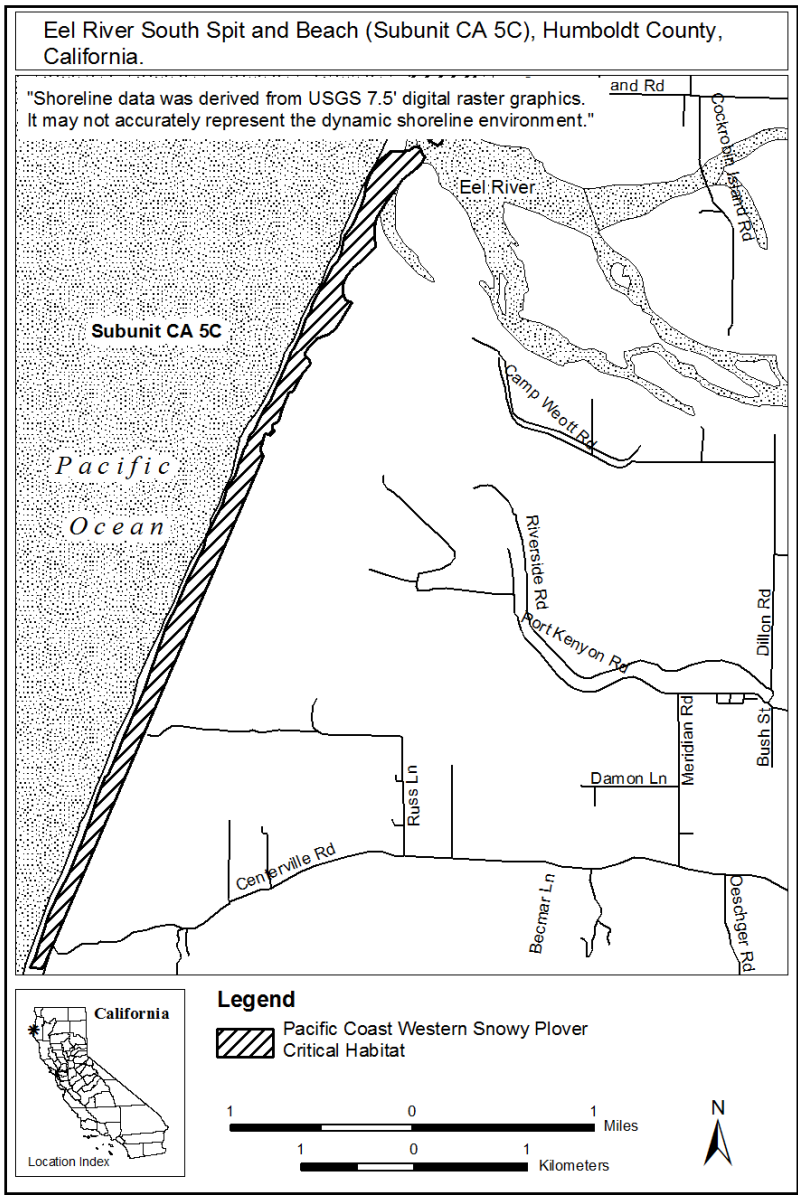
Legend

 Pacific Coast Western Snowy Plover Critical Habitat



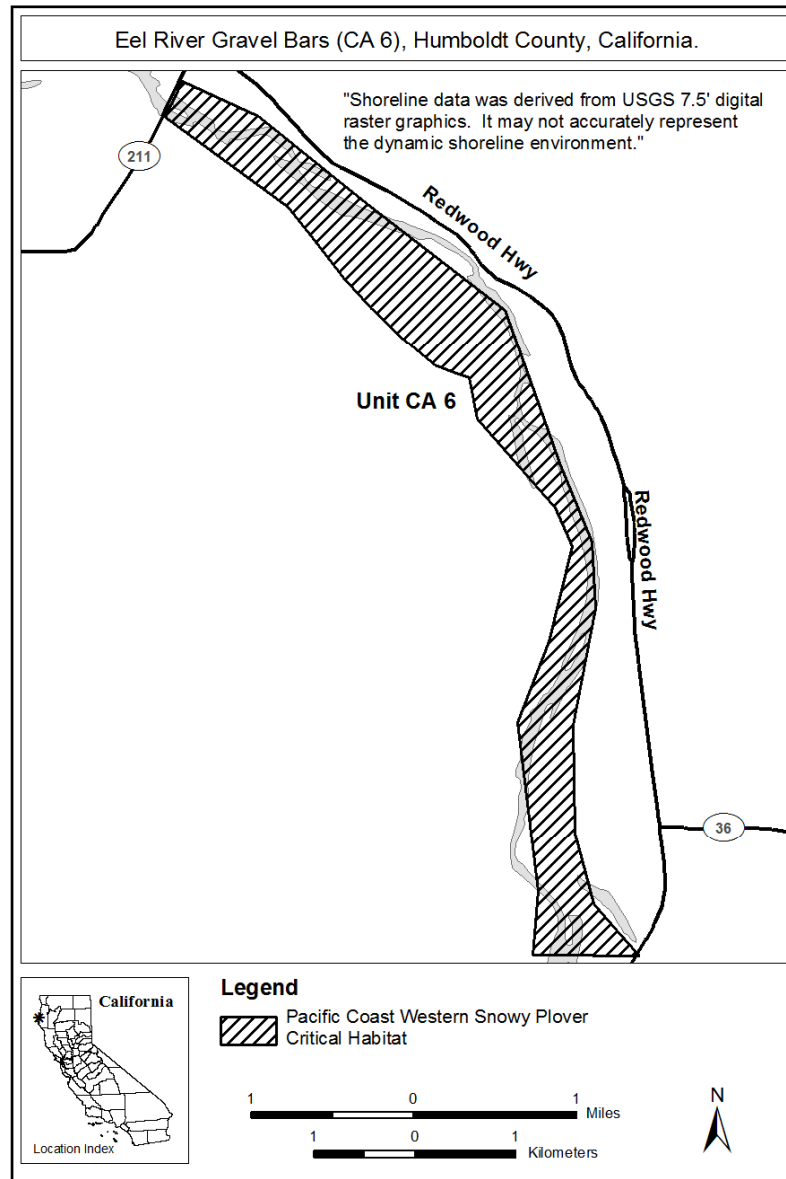
(34) Subunit CA 5B: Eel River North Spit and Beach, Humboldt County, California. Map of Subunits CA 5A and CA 5B is provided at paragraph 33 of this entry.

(35) Subunit CA 5C: Eel River South Spit and Beach, Humboldt County, California. Map follows:



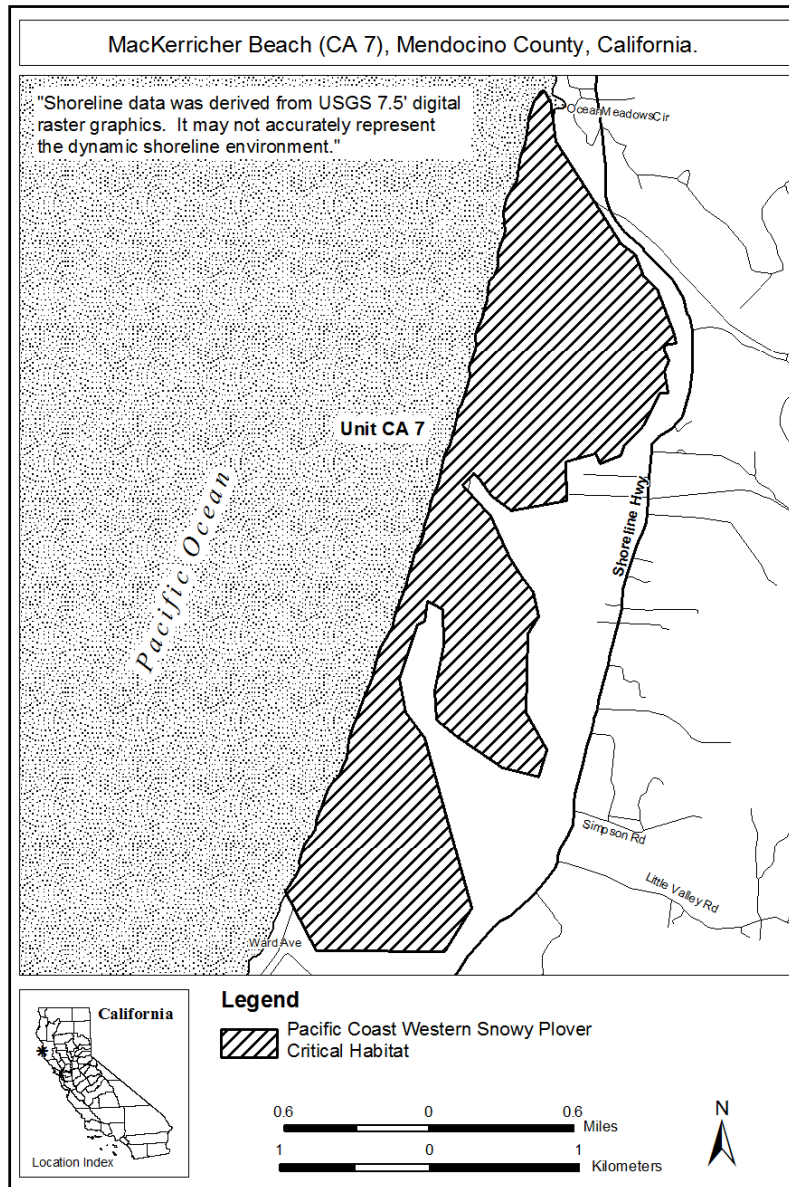
(36) Unit CA 6: Eel River Gravel Bars, Humboldt County, California. Map

follows:



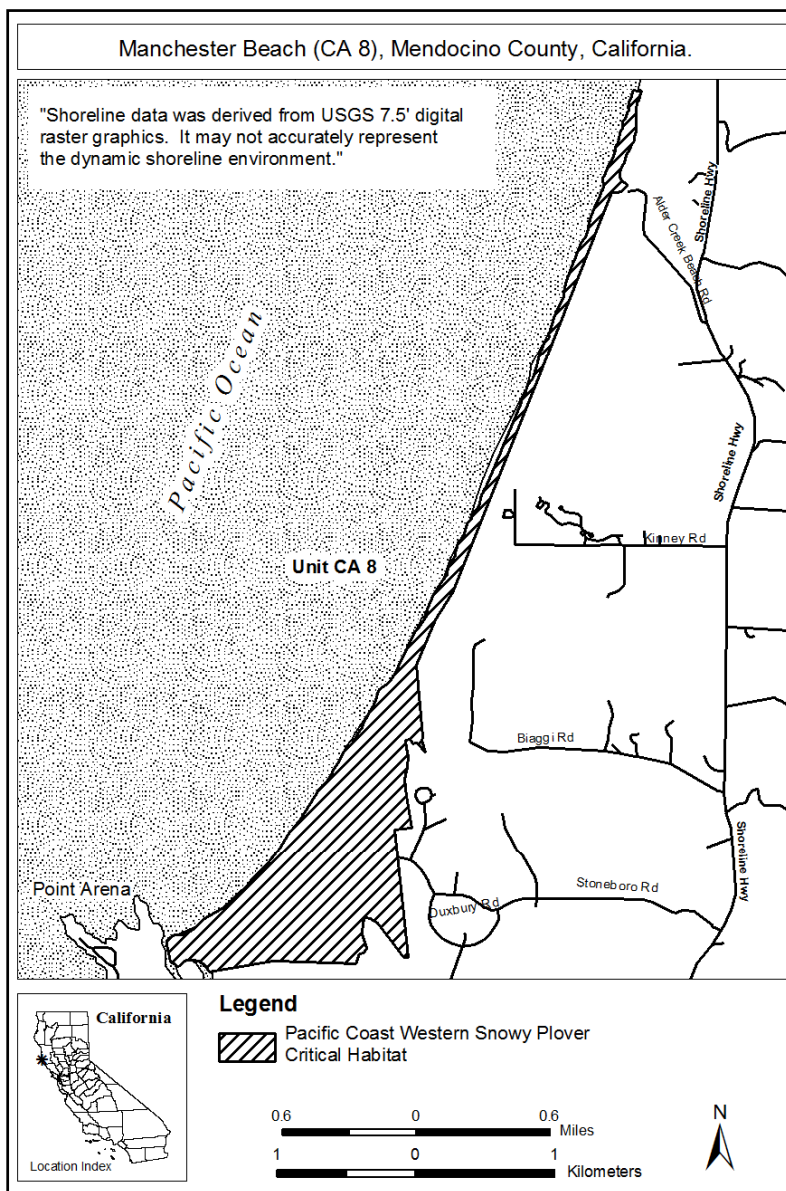
(37) Unit CA 7: MacKerricher Beach, Mendocino County, California. Map

follows:

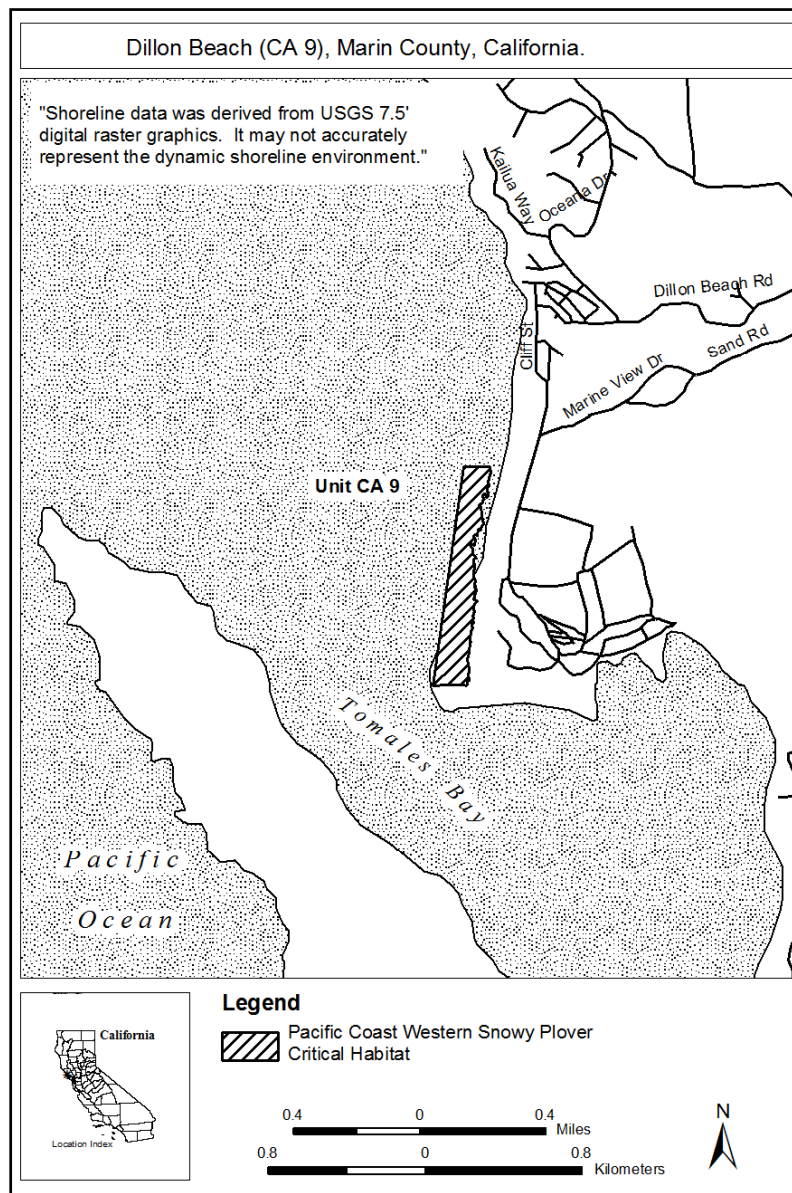


(38) Unit CA 8: Manchester Beach, Mendocino County, California. Map

follows:

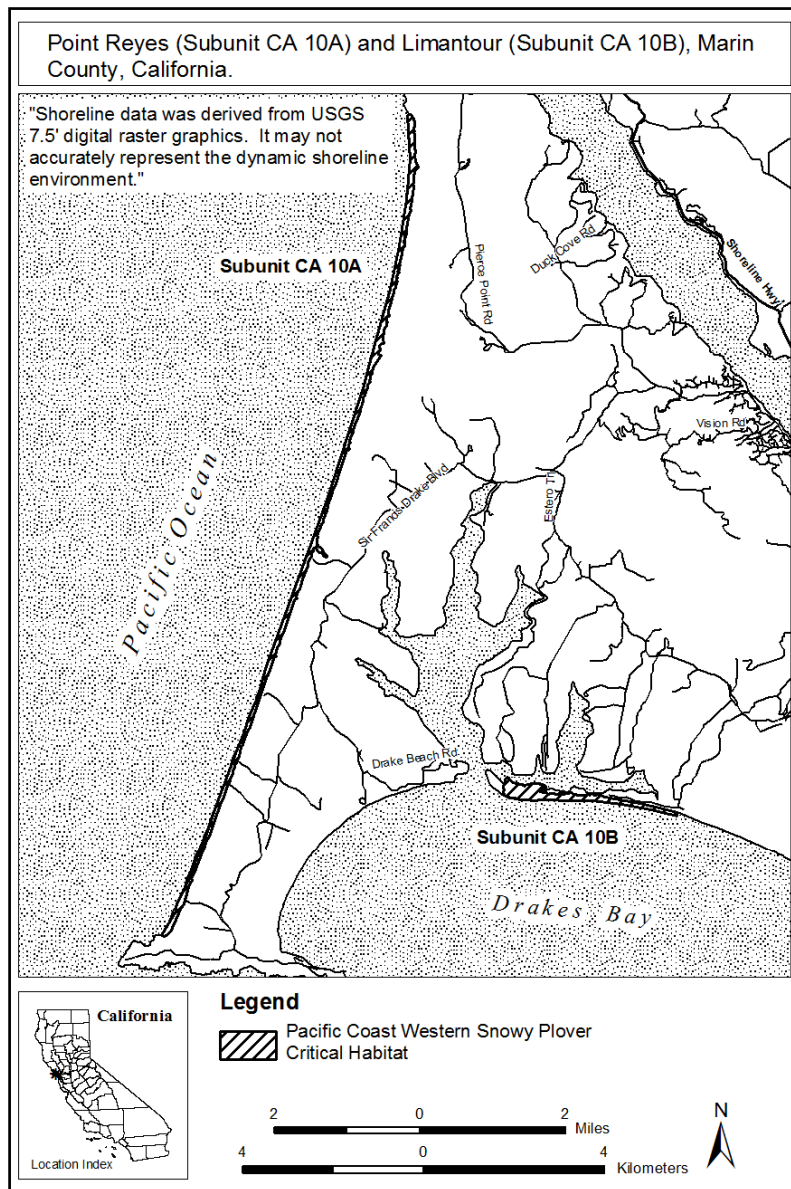


(39) Unit CA 9: Dillon Beach, Marin County, California. Map follows:



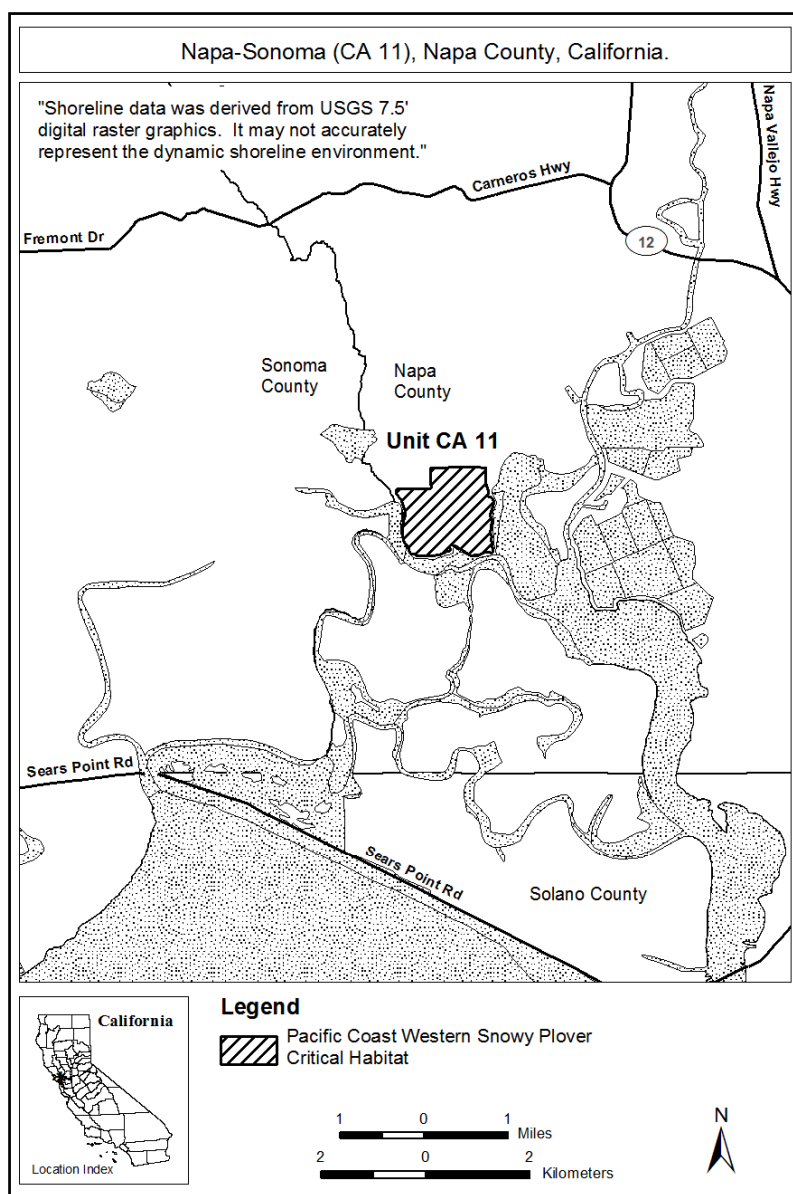
(40) Subunit CA 10A: Point Reyes, Marin County, California. Map of Subunits

CA 10A and CA 10B follows:

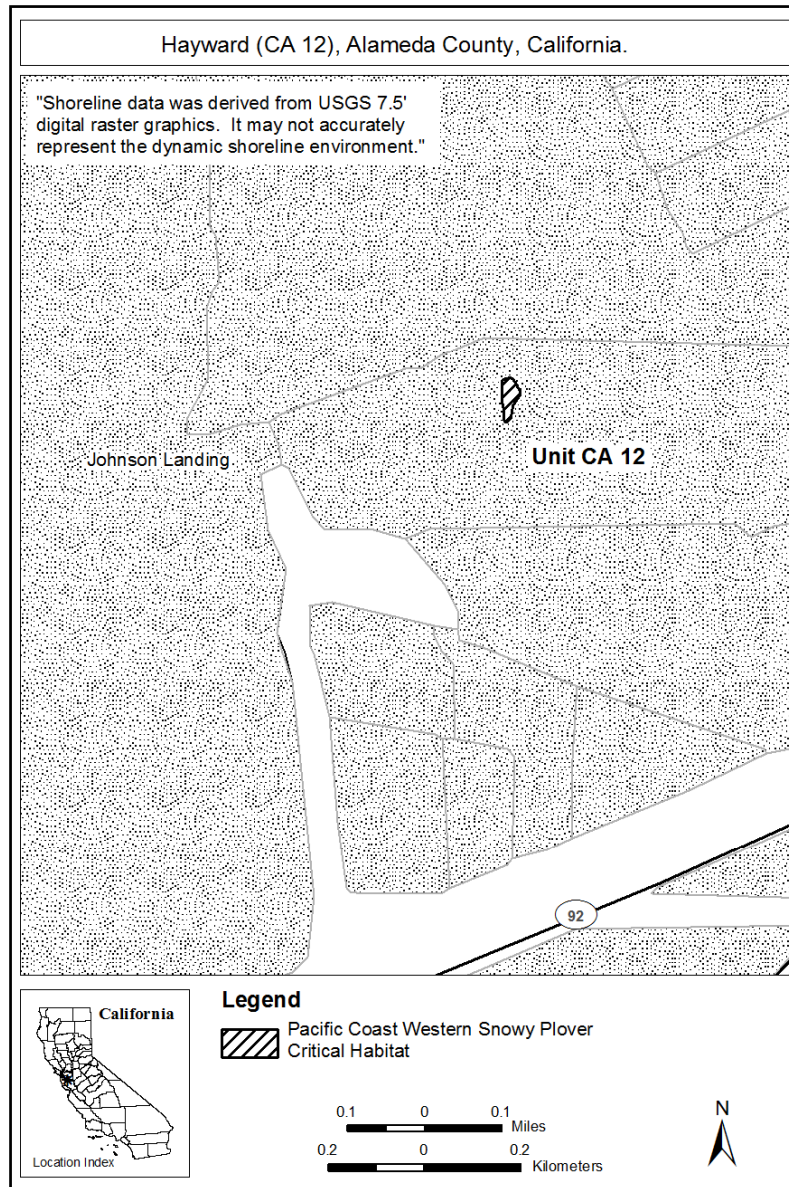


(41) Subunit CA 10B: Limantour, Marin County, California. Map of Subunits CA 10A and CA 10B is provided at paragraph 40 of this entry.

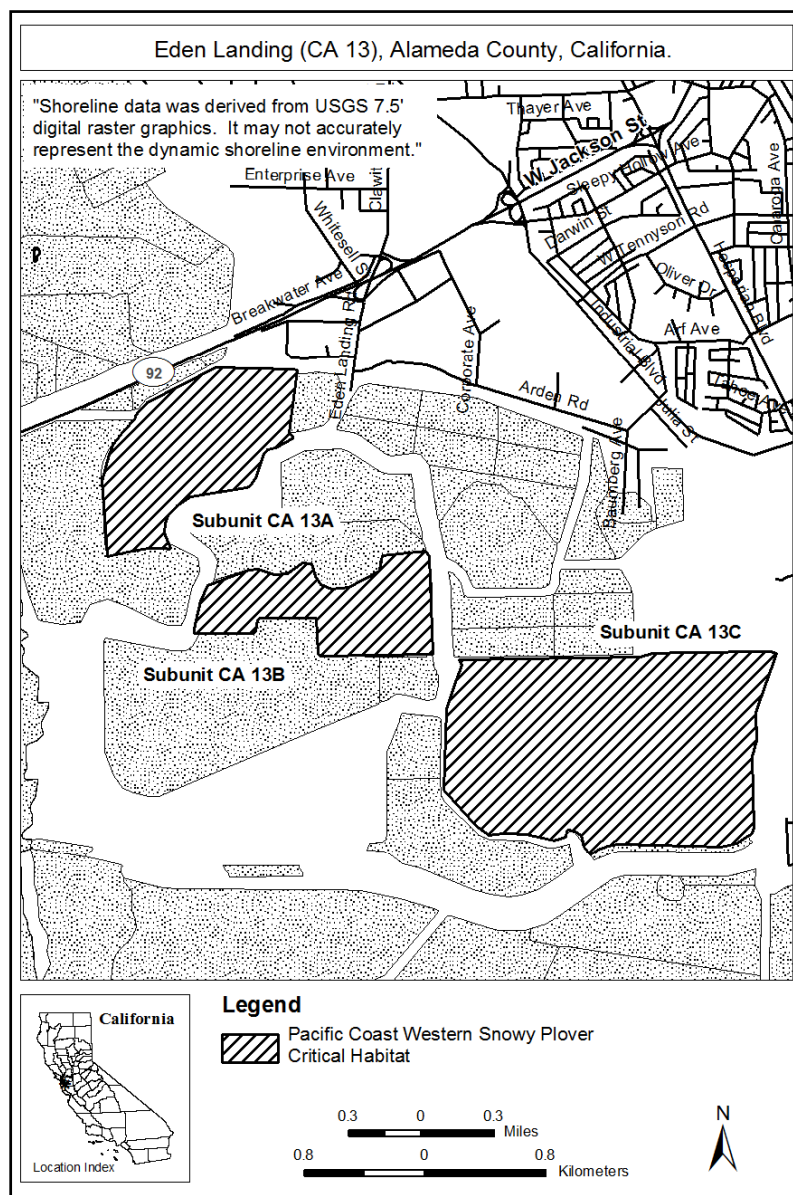
(42) Unit CA 11: Napa-Sonoma, Napa County, California. Map follows:



(43) Unit CA 12: Hayward, Alameda County, California. Map follows:



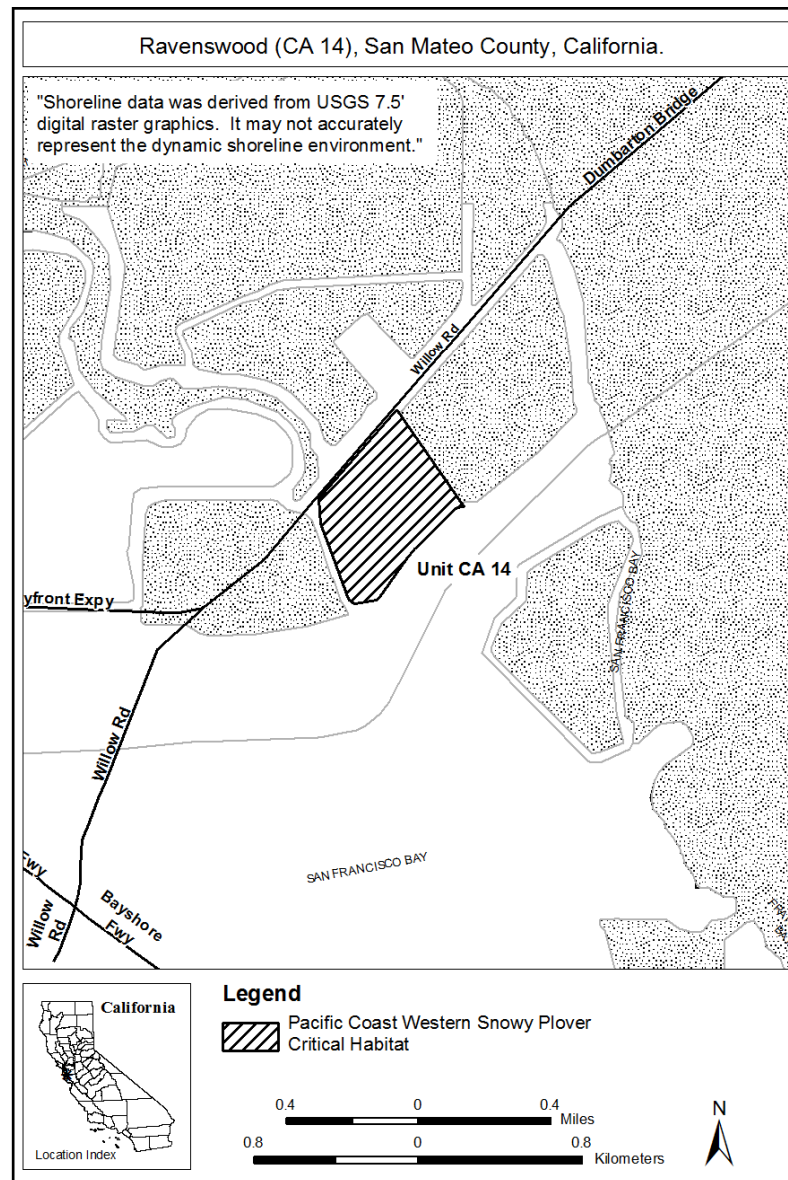
(44) Subunit CA 13A: Eden Landing, Alameda County, California. Map of Subunits CA 13A, CA 13B, and CA 13C follows:



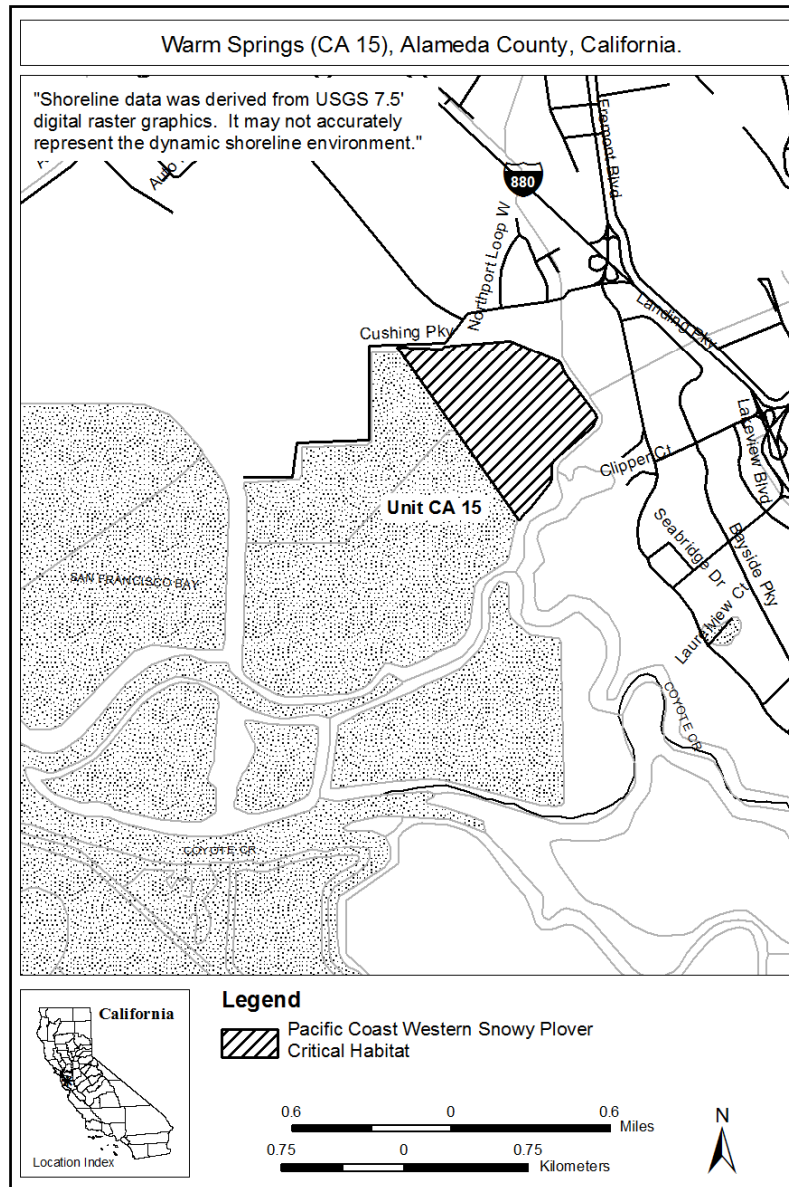
(45) Subunit CA 13B: Eden Landing, Alameda County, California. Map of Subunits CA 13A, CA 13B, and CA 13C is provided at paragraph 44 of this entry.

(46) Subunit CA 13C: Eden Landing, Alameda County, California. Map of Subunits CA 13A, CA 13B, and CA 13C is provided at paragraph 44 of this entry.

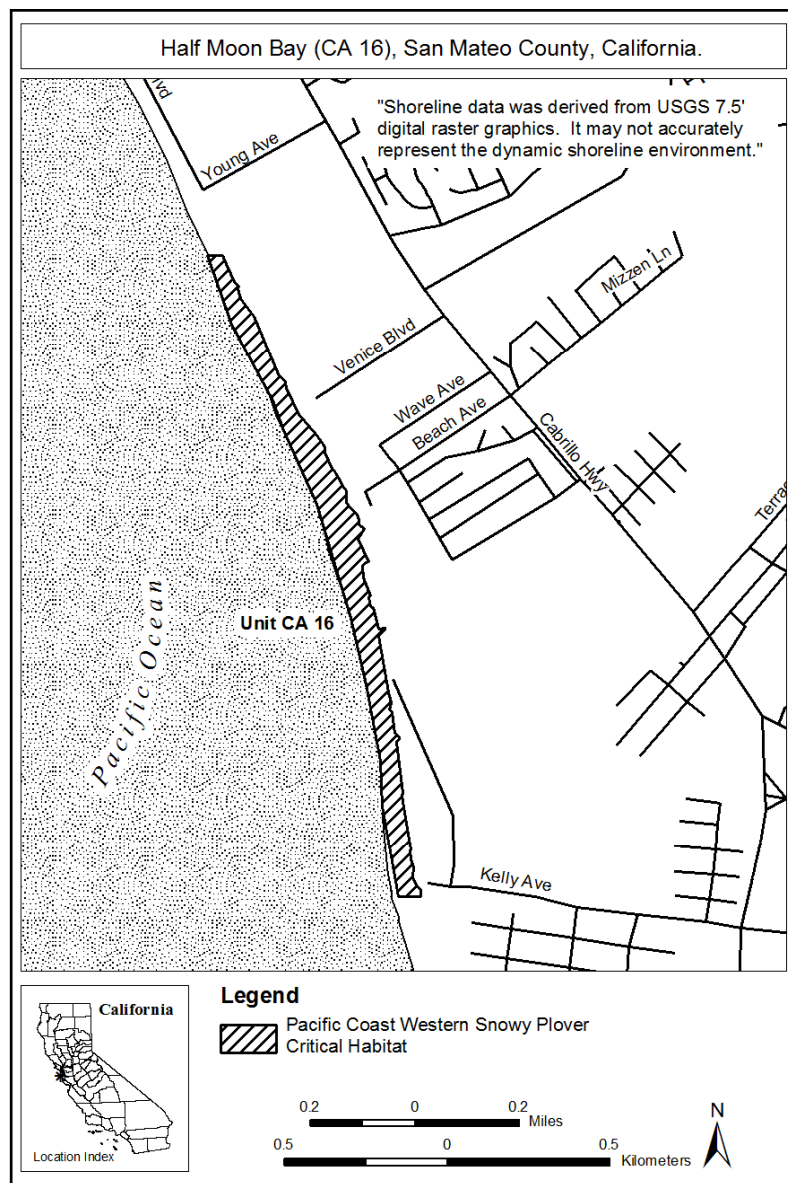
(47) Unit CA 14: Ravenswood, San Mateo County, California. Map follows:



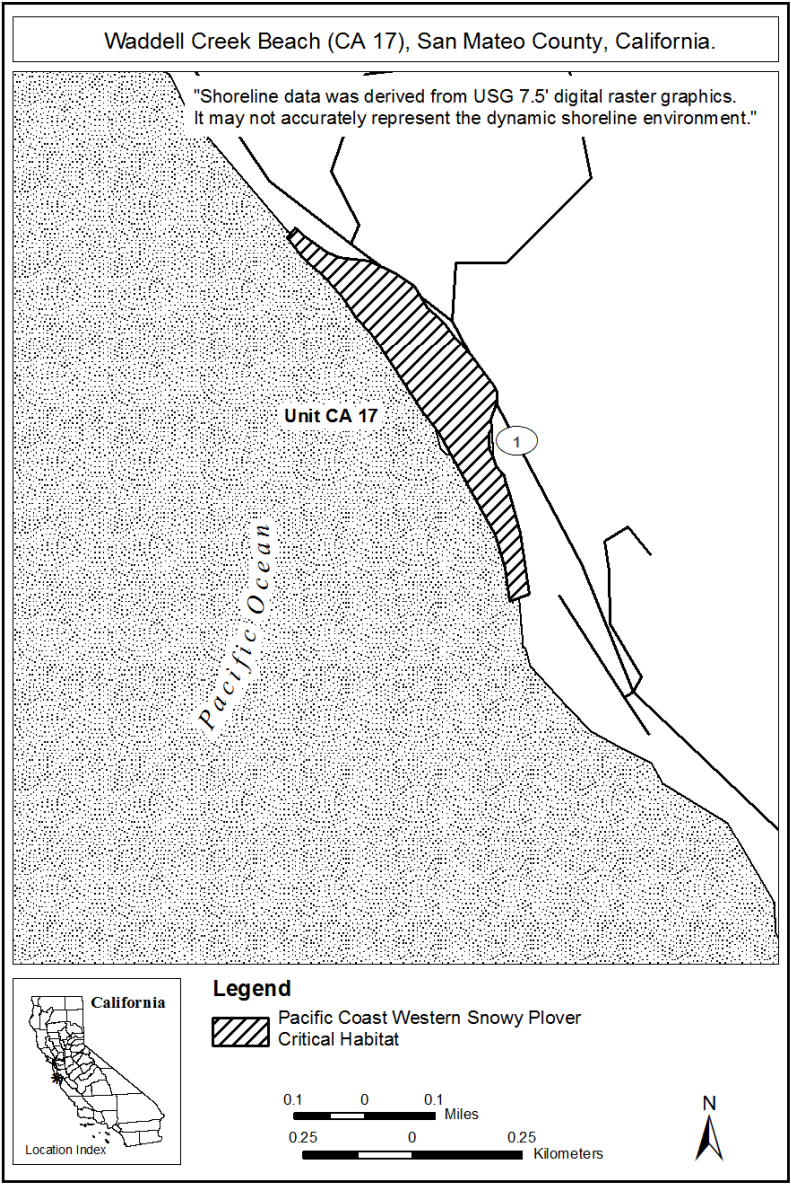
(48) Unit CA 15: Warm Springs, Alameda County, California. Map follows:



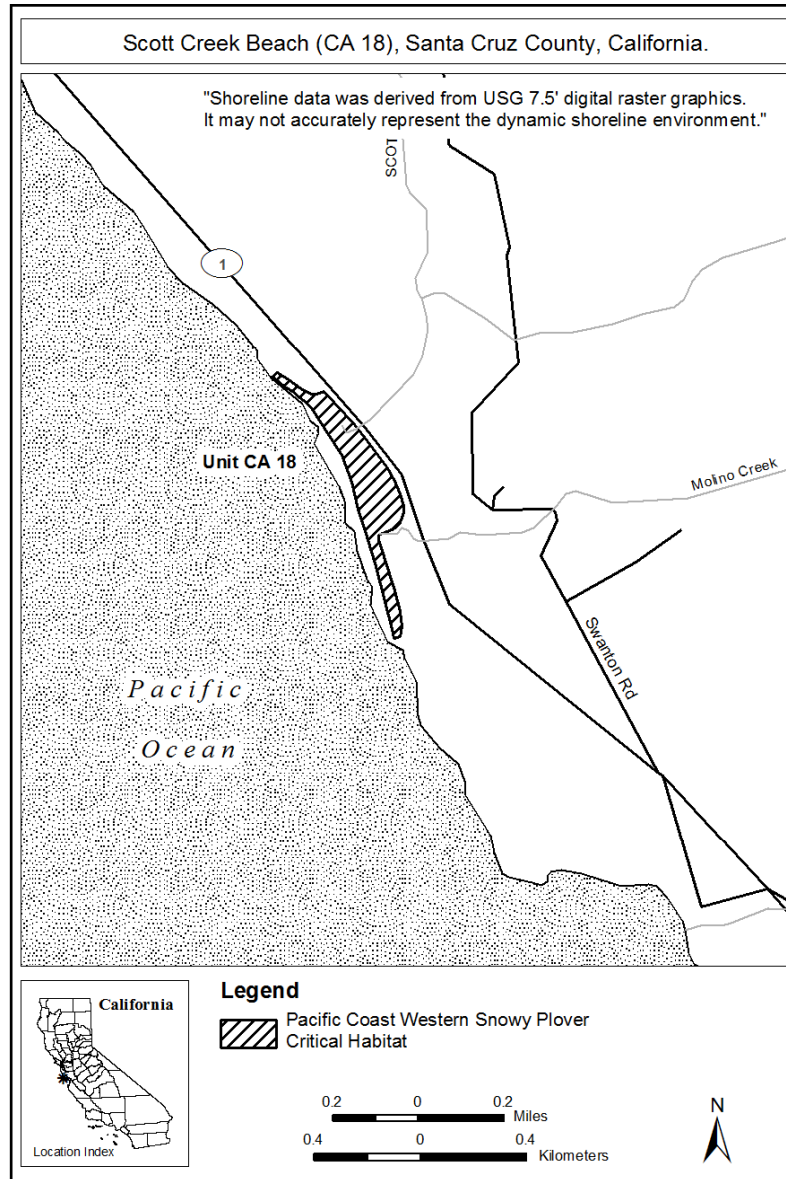
(49) Unit CA 16: Half Moon Bay, San Mateo County, California. Map follows:



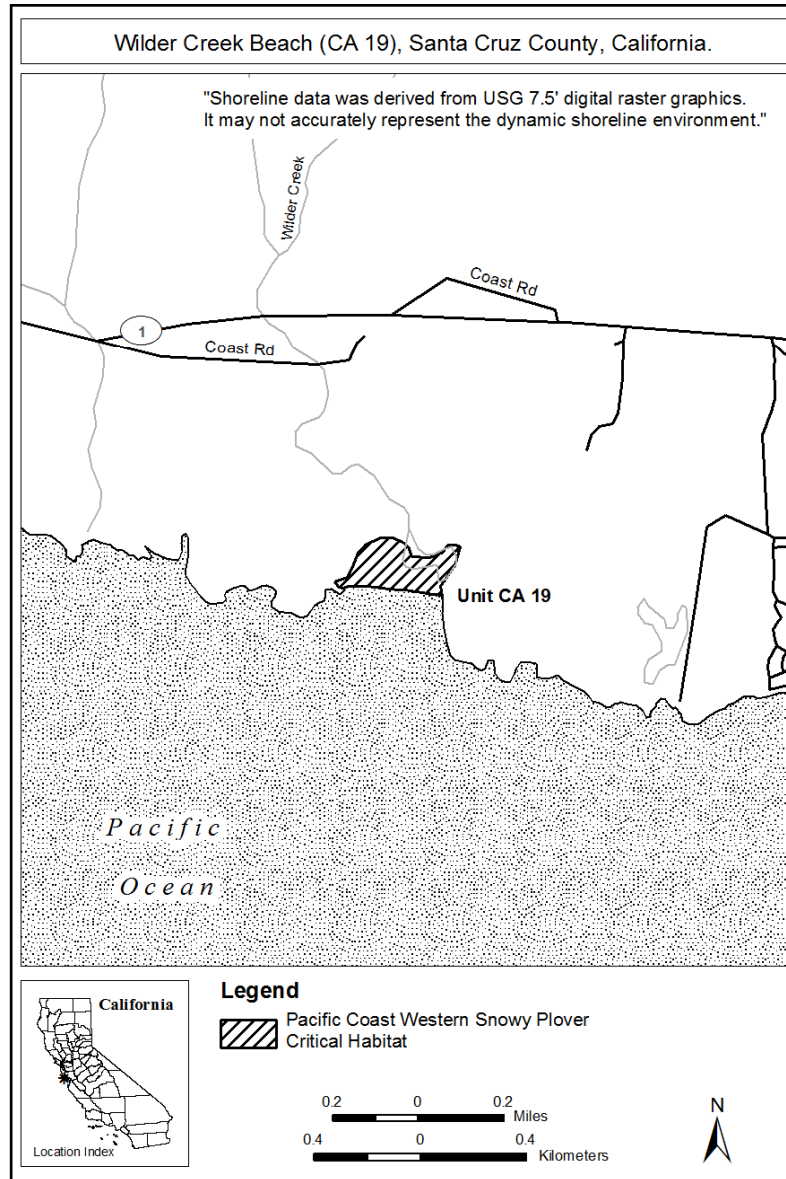
(50) Unit CA 17: Waddell Creek Beach, Santa Cruz County, California. Map follows:



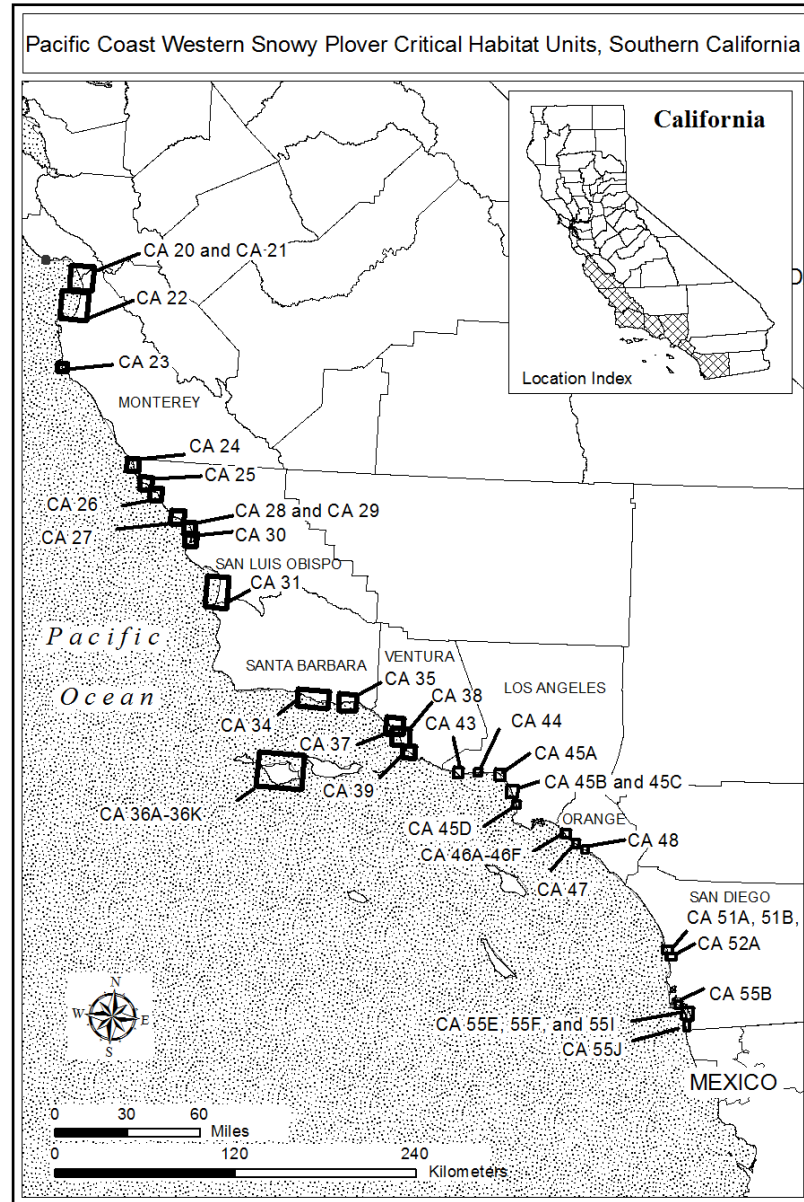
(51) Unit CA 18: Scott Creek Beach, Santa Cruz County, California. Map follows:



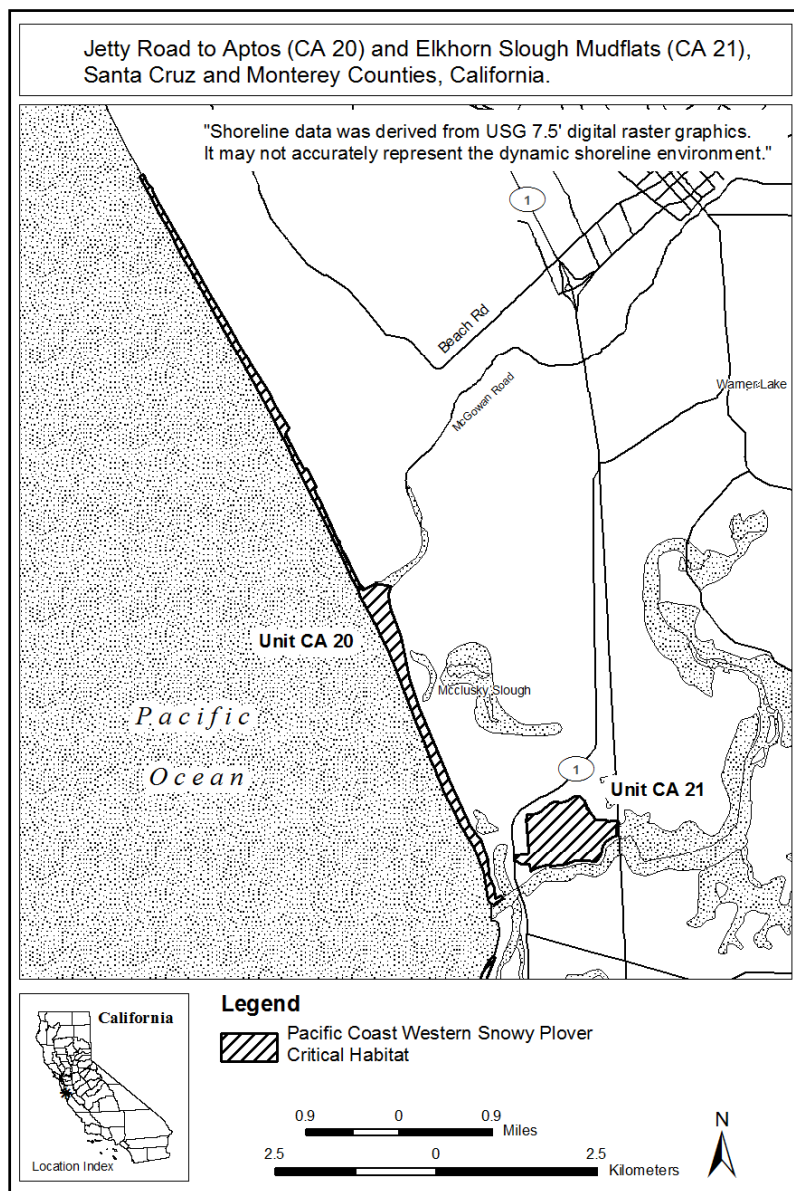
(52) Unit CA 19: Wilder Creek Beach, Santa Cruz County, California. Map follows:



(53) Index map of critical habitat units for the Pacific Coast western snowy plover (*Charadrius nivosus nivosus*) in Southern California follows:

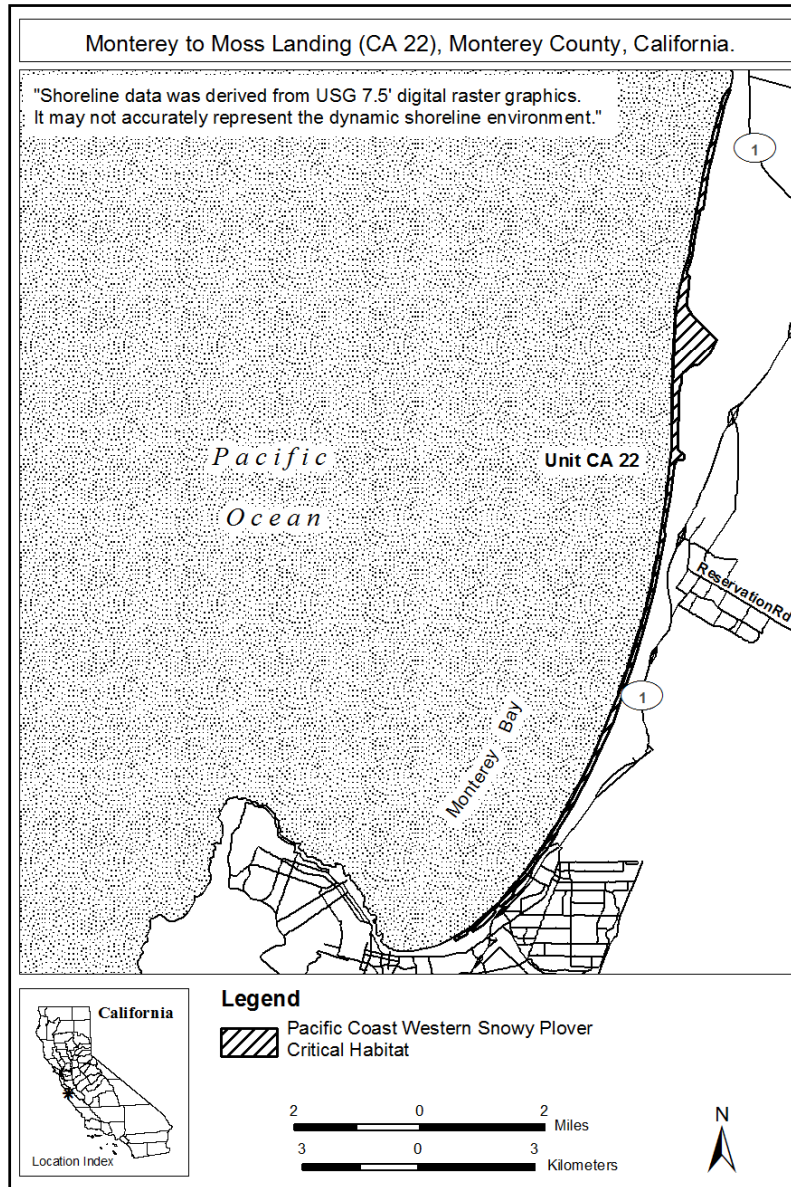


(54) Unit CA 20: Jetty Road to Aptos, Santa Cruz and Monterey Counties, California. Map of Units CA 20 and CA 21 follows:

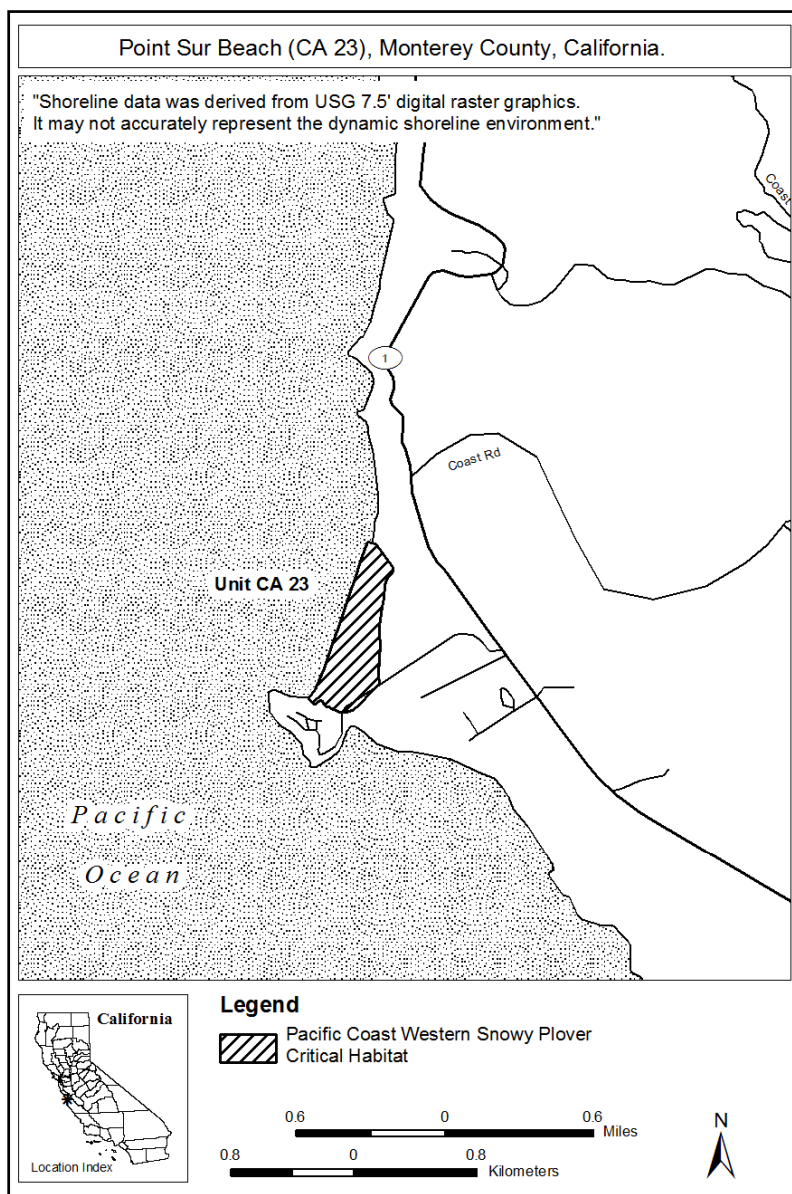


(55) Unit CA 21: Elkhorn Slough Mudflats, Monterey County, California. Map of Units CA 20 and CA 21 is provided at paragraph 54.

(56) Unit CA 22: Monterey to Moss Landing, Monterey County, California. Map follows:

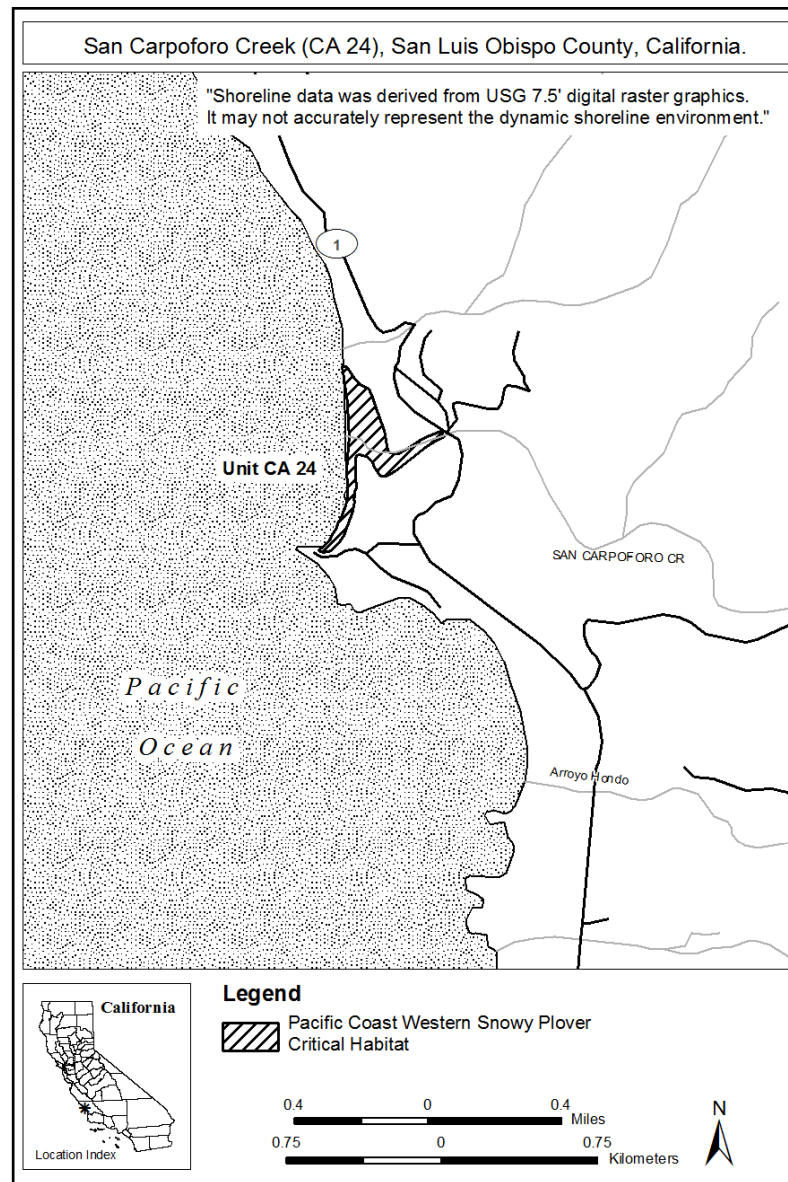


(57) Unit CA 23: Point Sur Beach, Monterey County, California. Map follows:



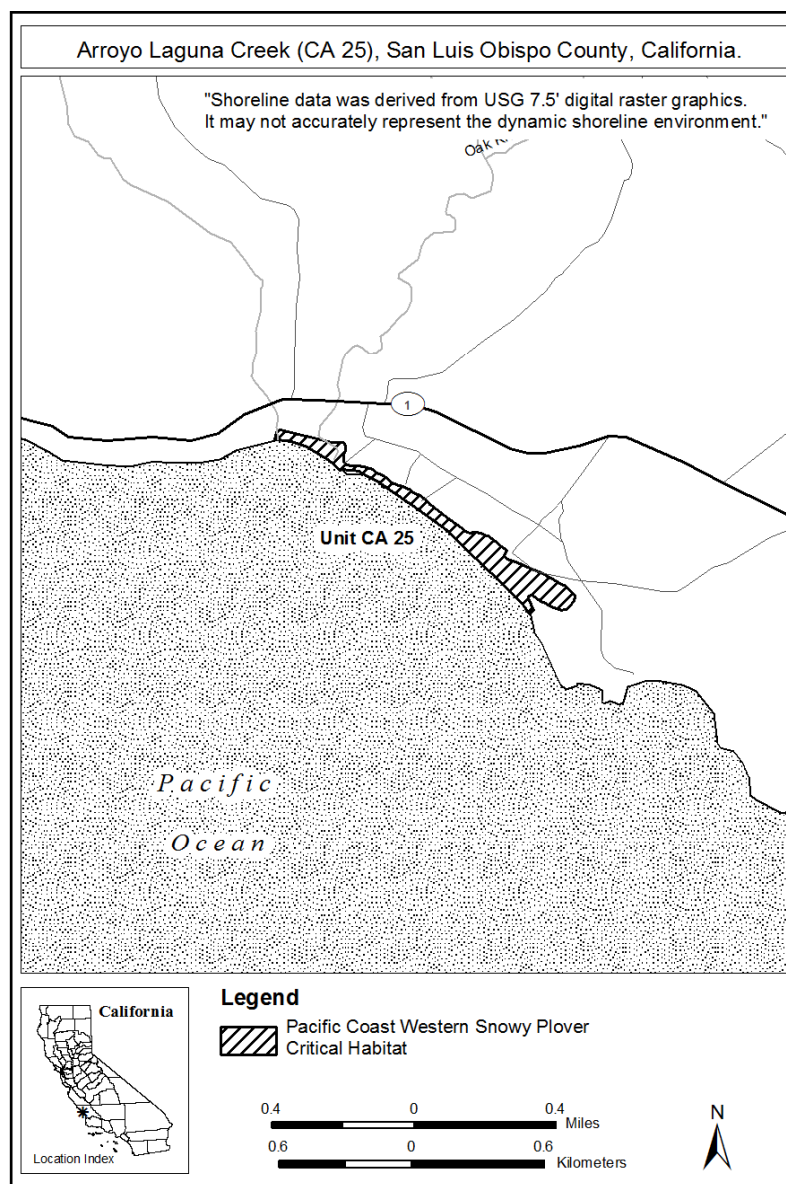
(58) Unit CA 24: San Carpoforo Creek, San Luis Obispo County, California.

Map follows:



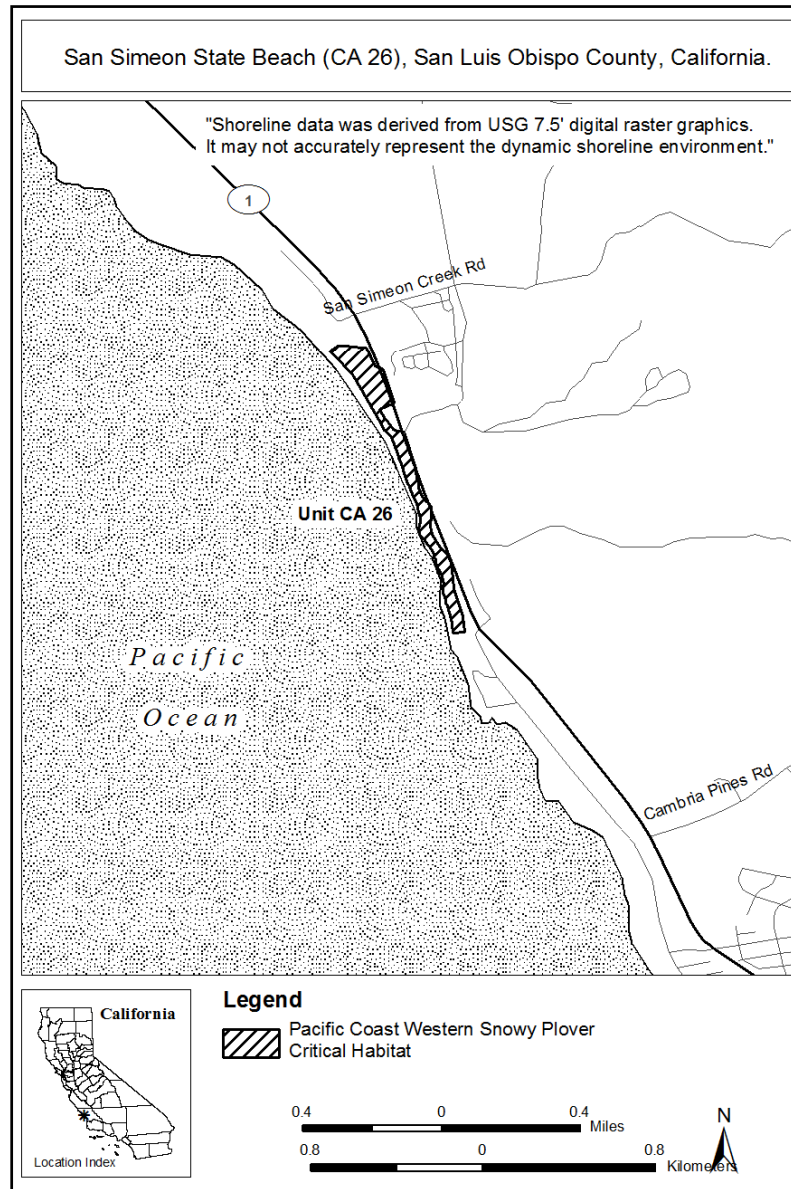
(59) Unit CA 25: Arroyo Laguna Creek, San Luis Obispo County, California.

Map follows:

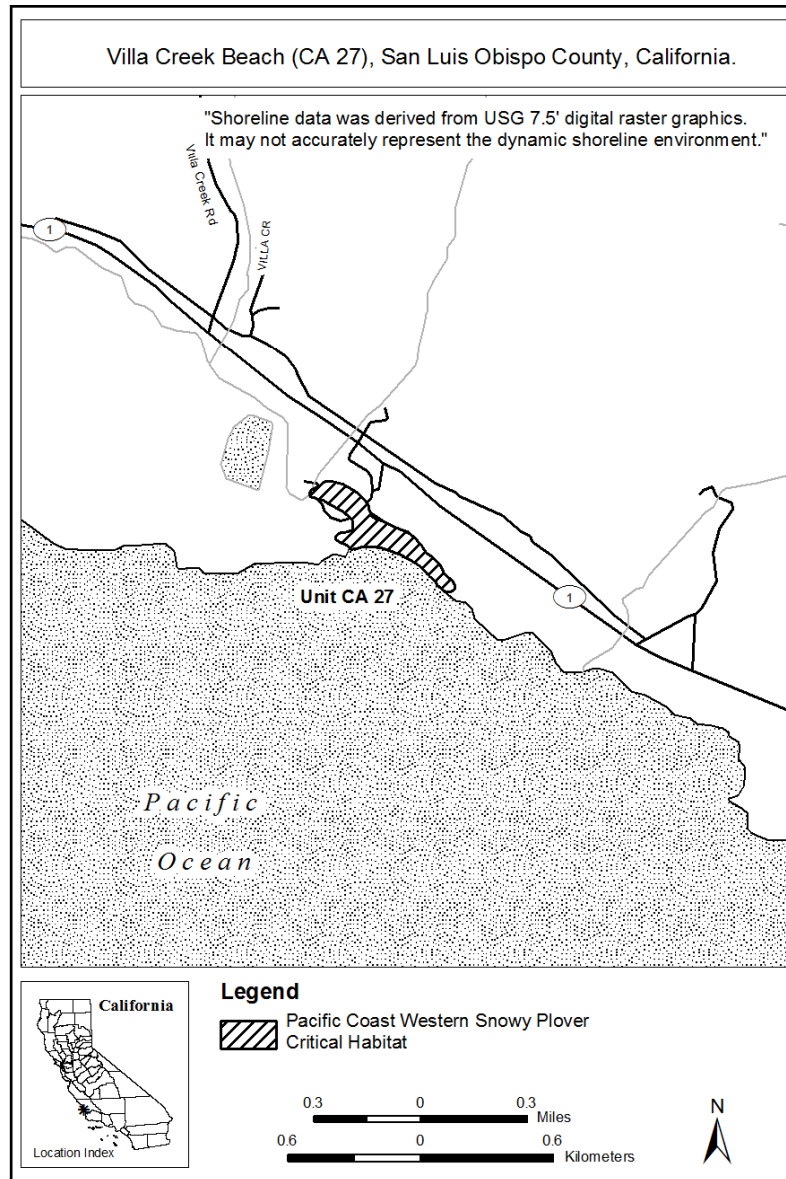


(60) Unit CA 26: San Simeon State Beach, San Luis Obispo County, California.

Map follows:

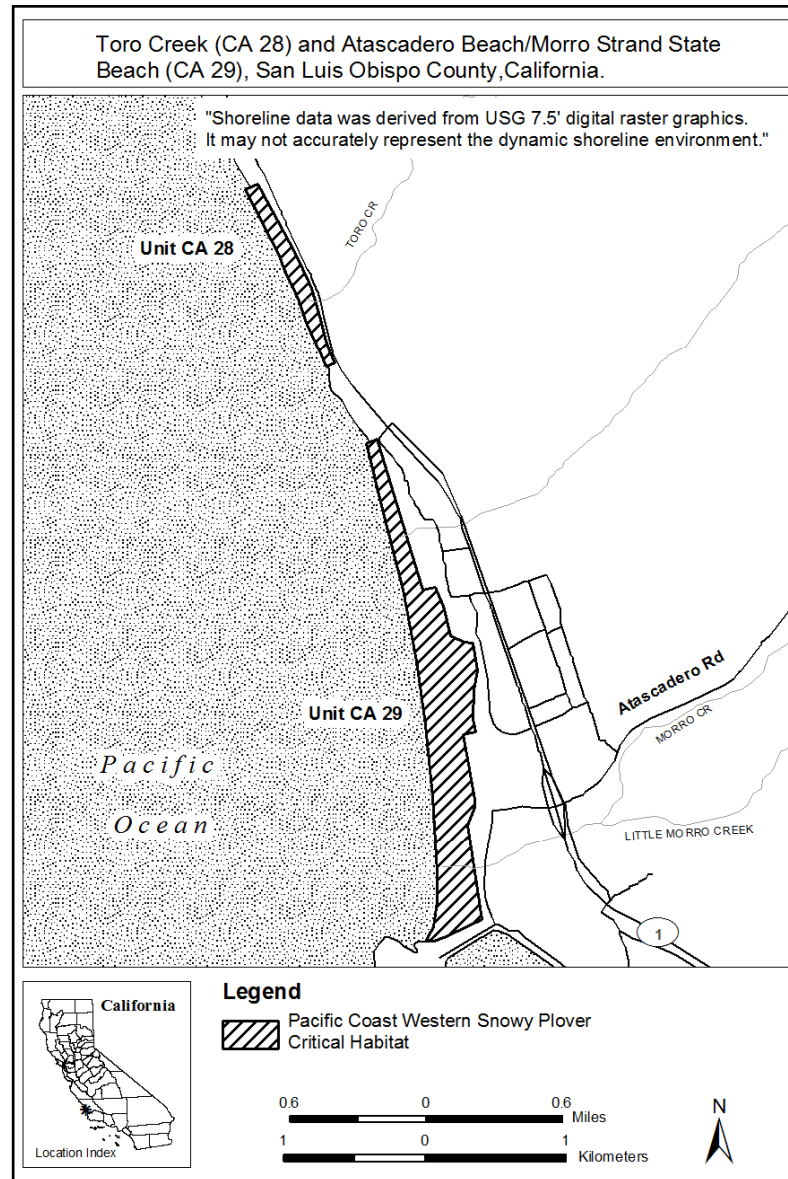


(61) Unit CA 27: Villa Creek Beach, San Luis Obispo County, California. Map follows:



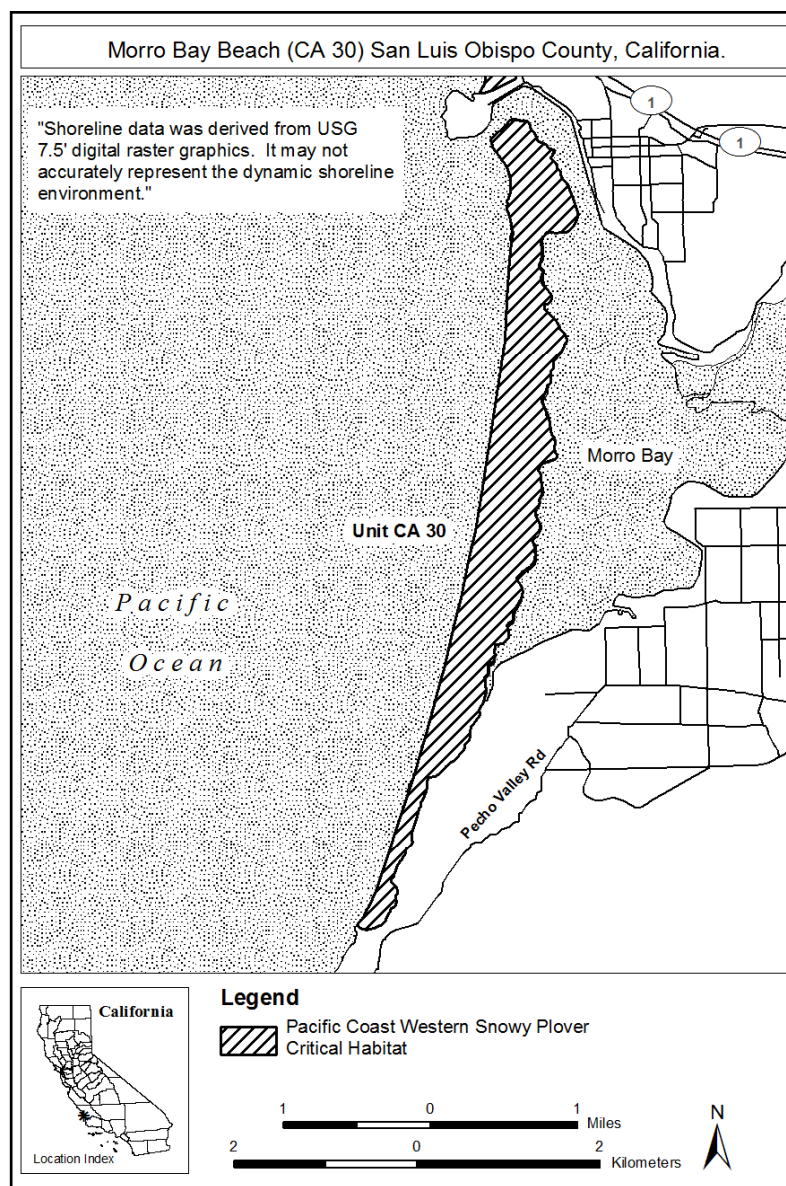
(62) Unit CA 28: Toro Creek, San Luis Obispo County, California. Map of Units

CA 28 and CA 29 follows:

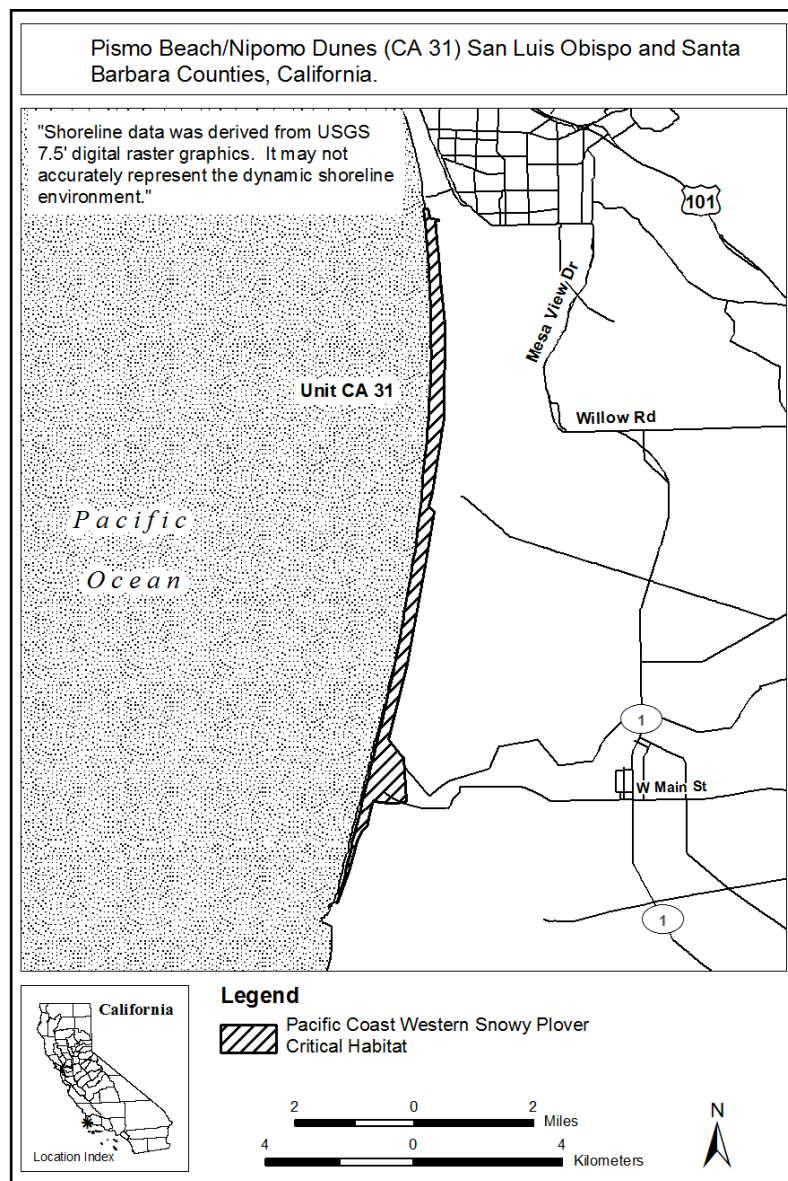


(63) Unit CA 29: Atascadero Beach/Morro Strand State Beach: San Luis Obispo County, California. Map of Units CA 28 and CA 29 is provided at paragraph 62 of this entry.

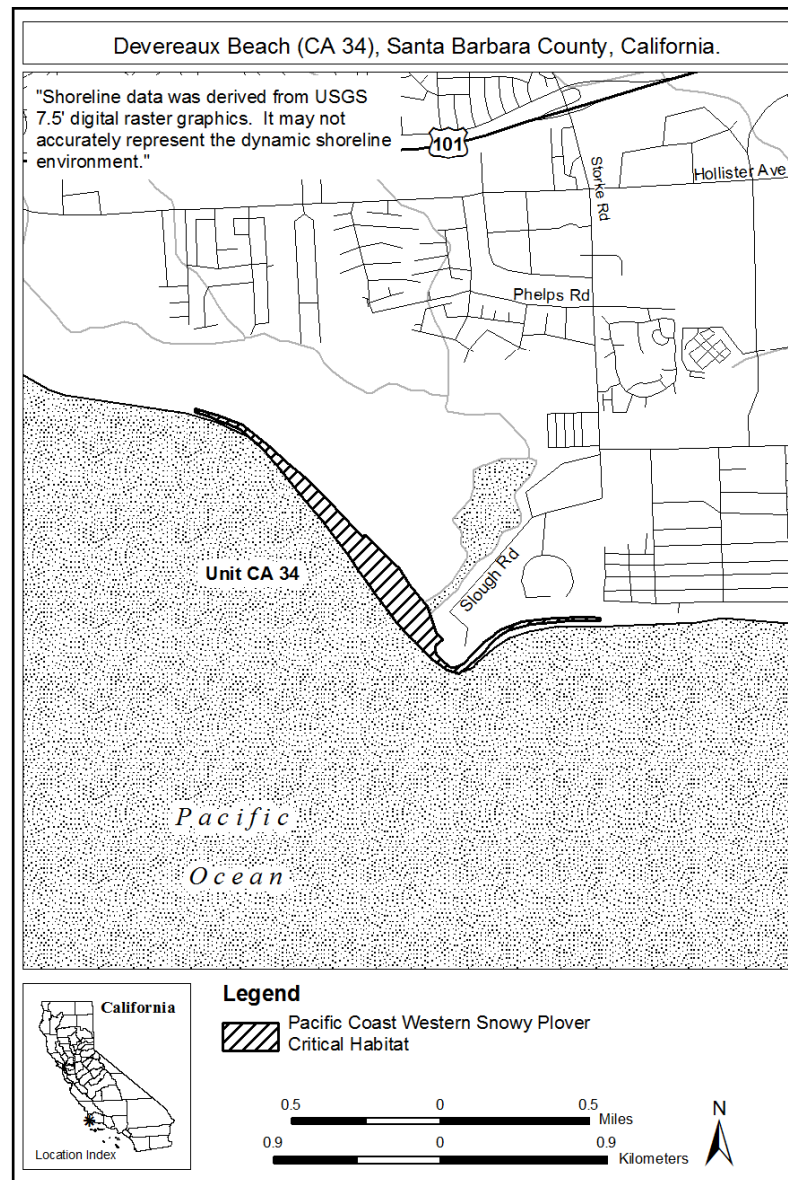
(64) Unit CA 30: Morro Bay Beach, San Luis Obispo County, California. Map follows:



(65) Unit CA 31: Pismo Beach/Nipomo Dunes, San Luis Obispo and Santa Barbara Counties, California. Map follows:

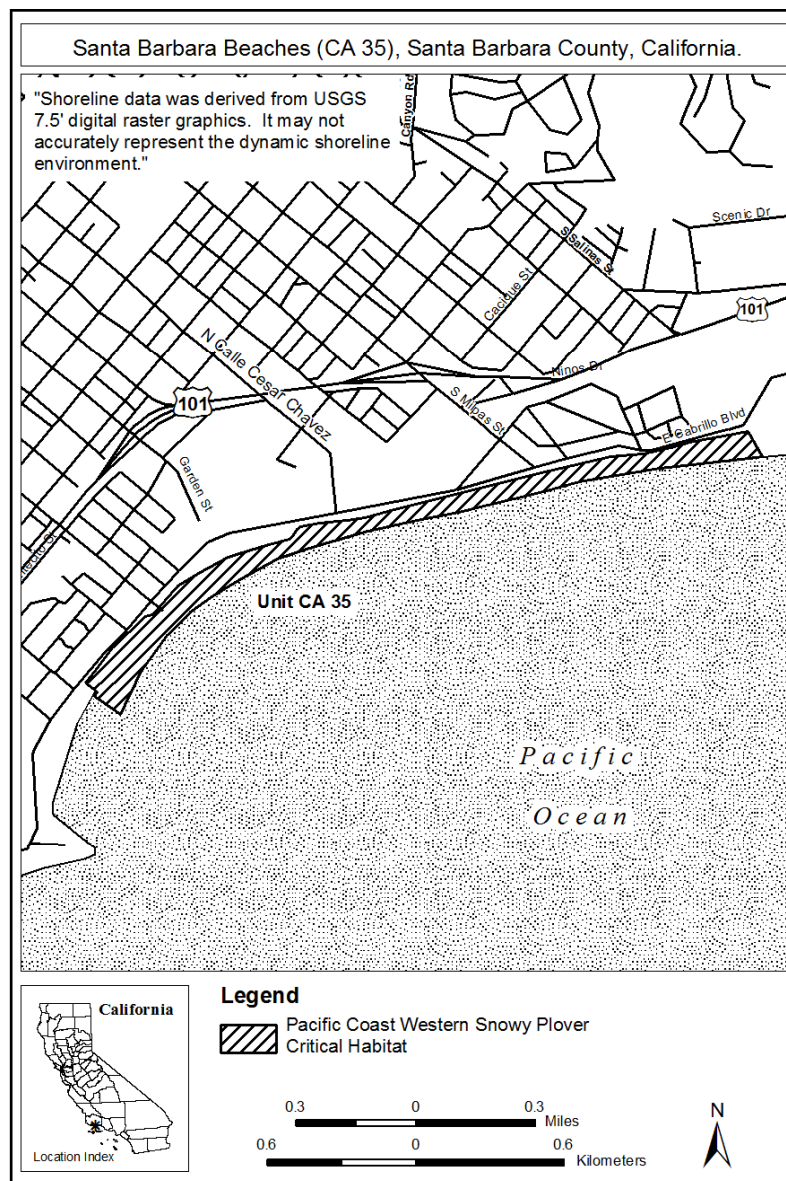


(66) Unit CA 34: Devereaux Beach, Santa Barbara County, California. Map follows:

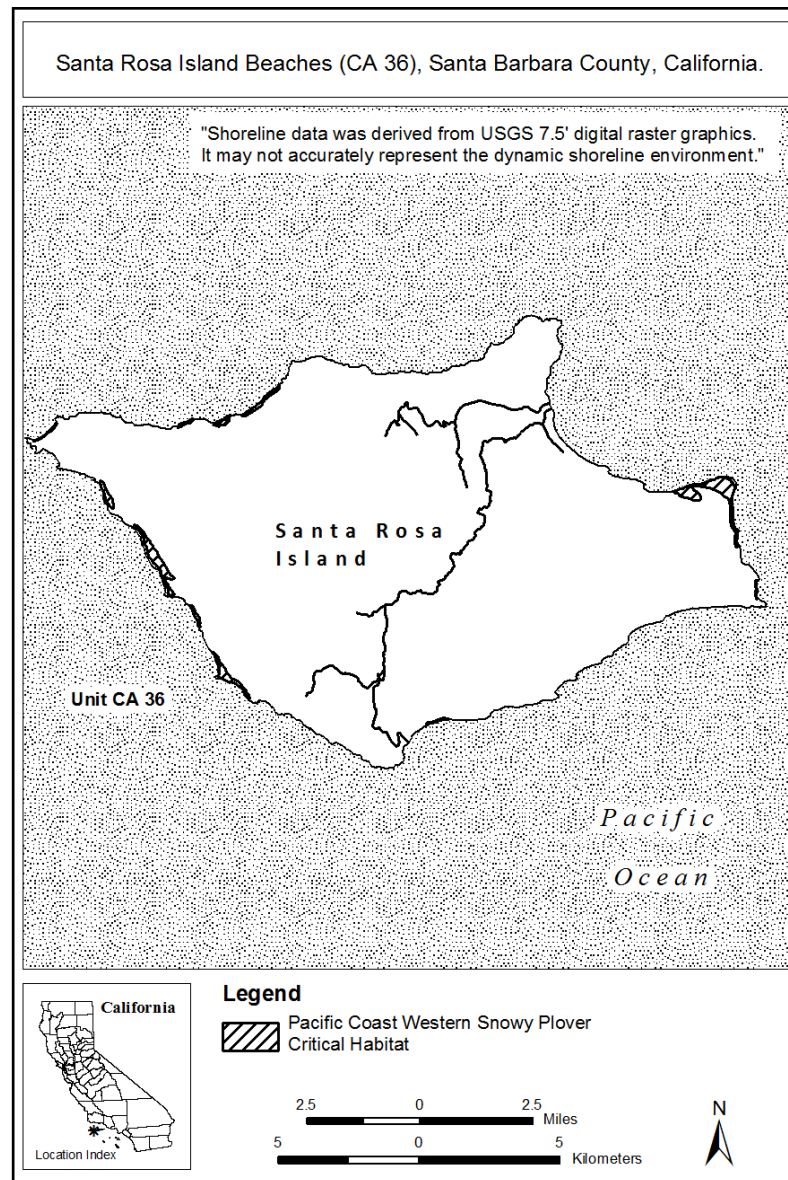


(67) Unit CA 35: Santa Barbara Beaches, Santa Barbara County, California.

Map follows:



(68) Subunit CA 36A: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K follows:



(69) Subunit CA 36B: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(70) Unit CA 36C: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(71) Unit CA 36D: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(72) Unit CA 36E: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(73) Unit CA 36F: Santa Rosa Island Beaches, Santa Barbara County, California. Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(74) Unit CA 36G: Santa Rosa Island Beaches, Santa Barbara County, California.

Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(75) Unit CA 36H: Santa Rosa Island Beaches, Santa Barbara County, California.

Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

(76) Unit CA 36I: Santa Rosa Island Beaches, Santa Barbara County, California.

Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

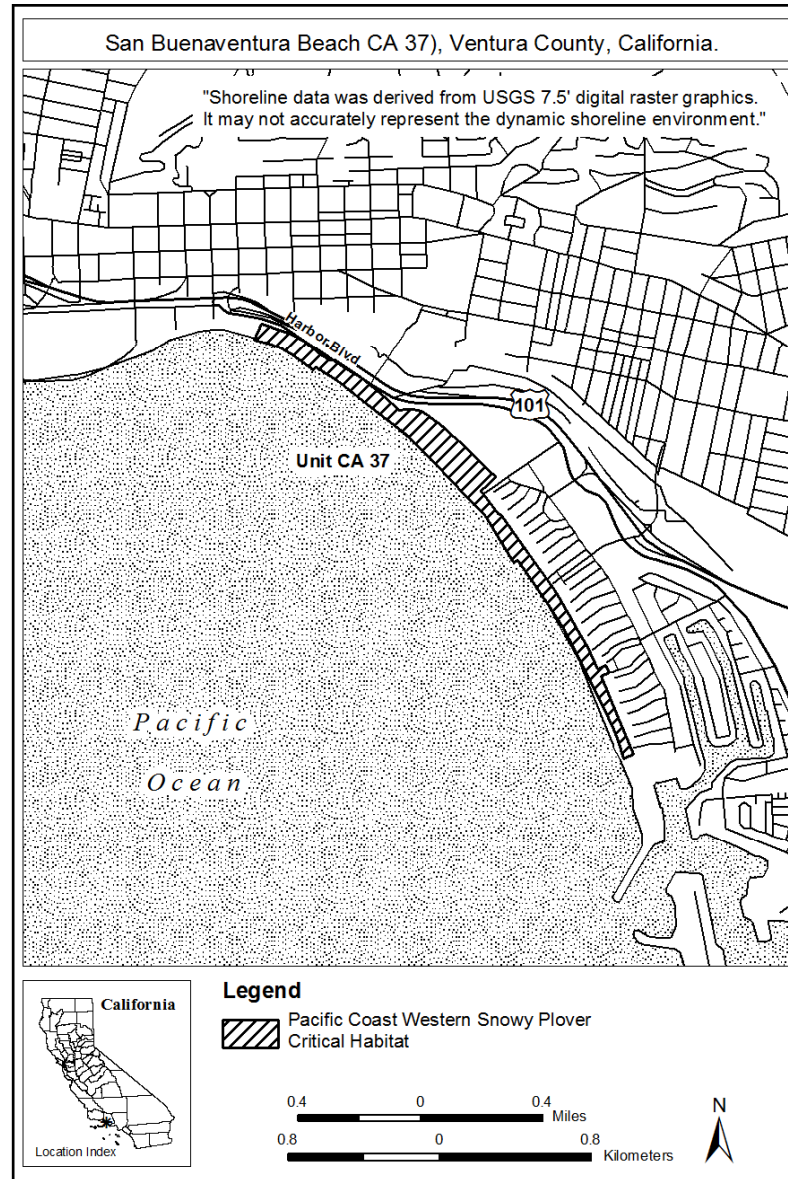
(77) Unit CA 36J: Santa Rosa Island Beaches, Santa Barbara County, California.

Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

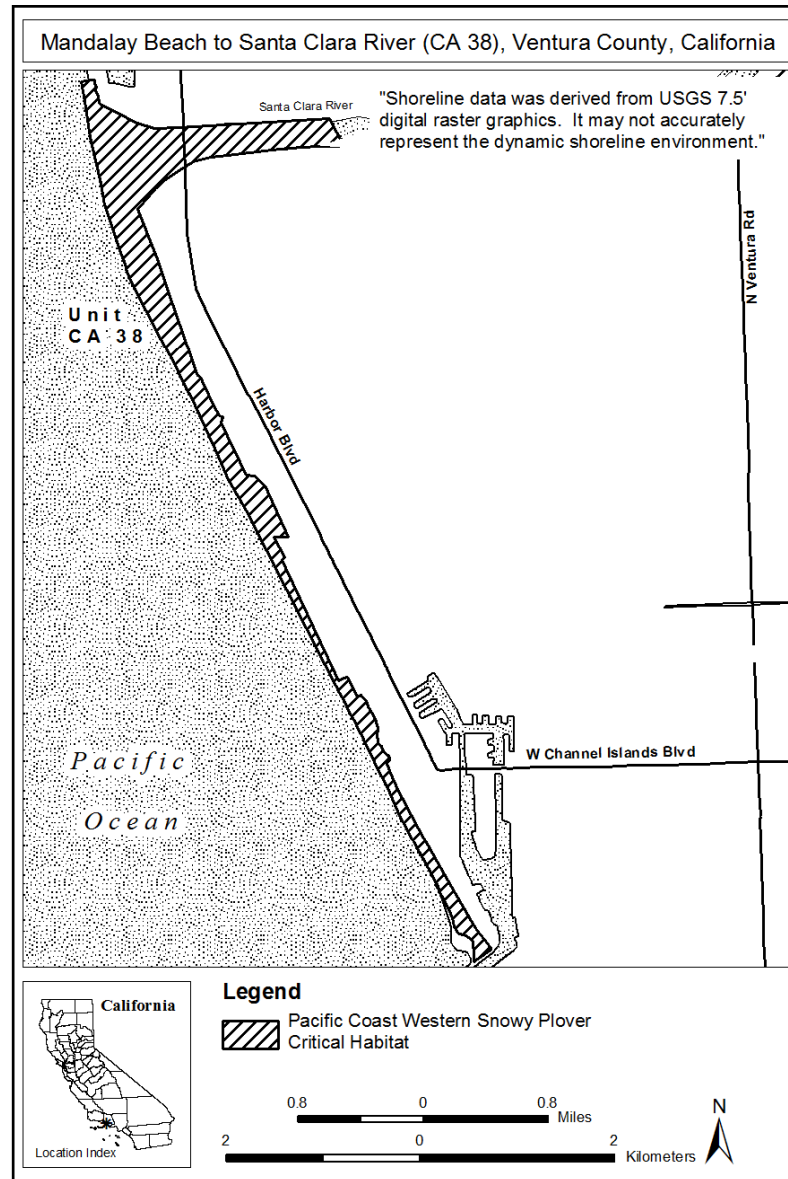
(78) Unit CA 36K: Santa Rosa Island Beaches, Santa Barbara County, California.

Map of Unit CA 36: Santa Rosa Island Beaches, including Subunits CA 36A through CA 36K is provided at paragraph 68 of this entry.

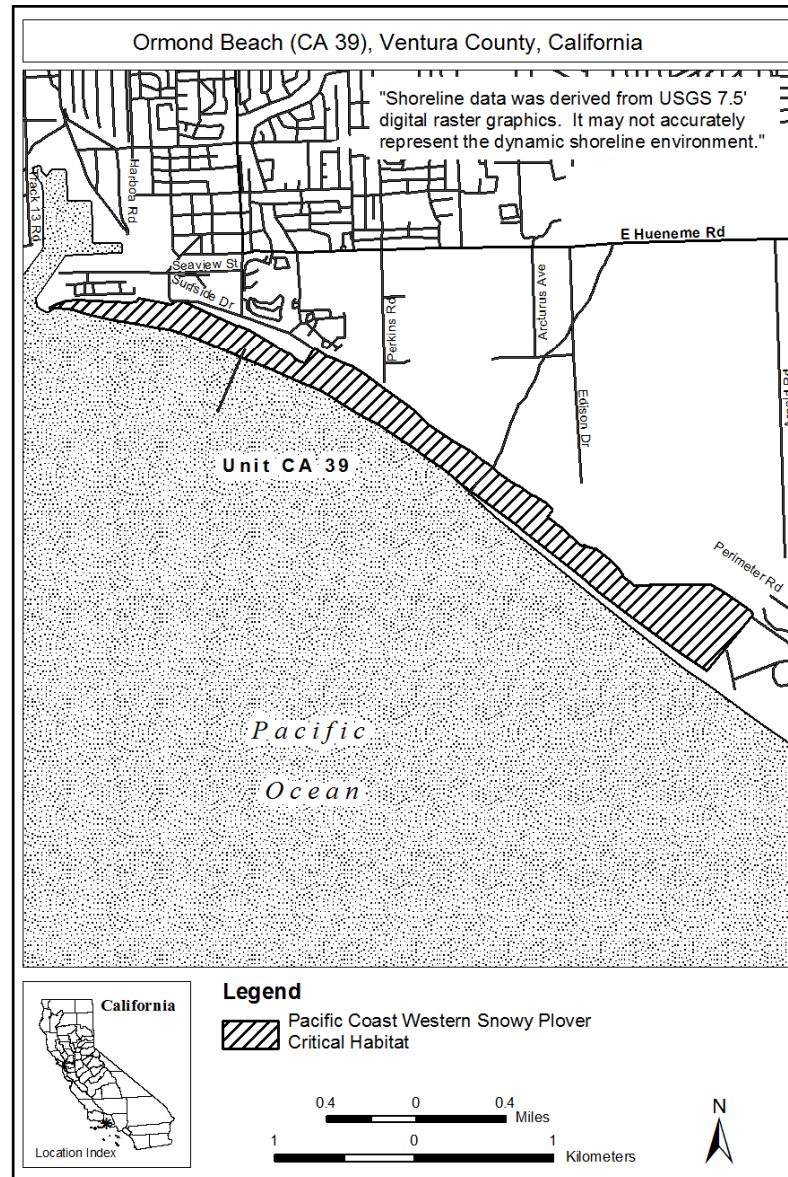
(79) Unit CA 37: San Buenaventura Beach, Ventura County, California. Map follows:



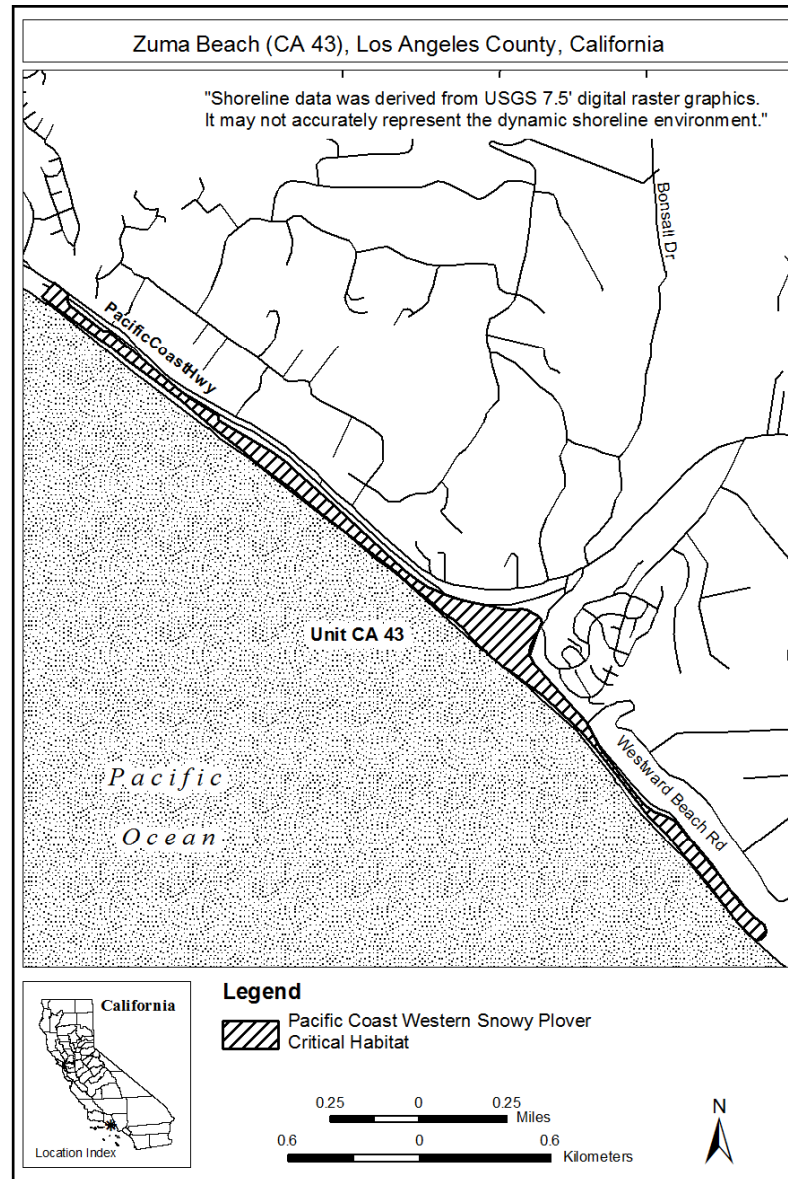
(80) Unit CA 38: Mandalay Beach to Santa Clara River, Ventura County, California. Map follows:



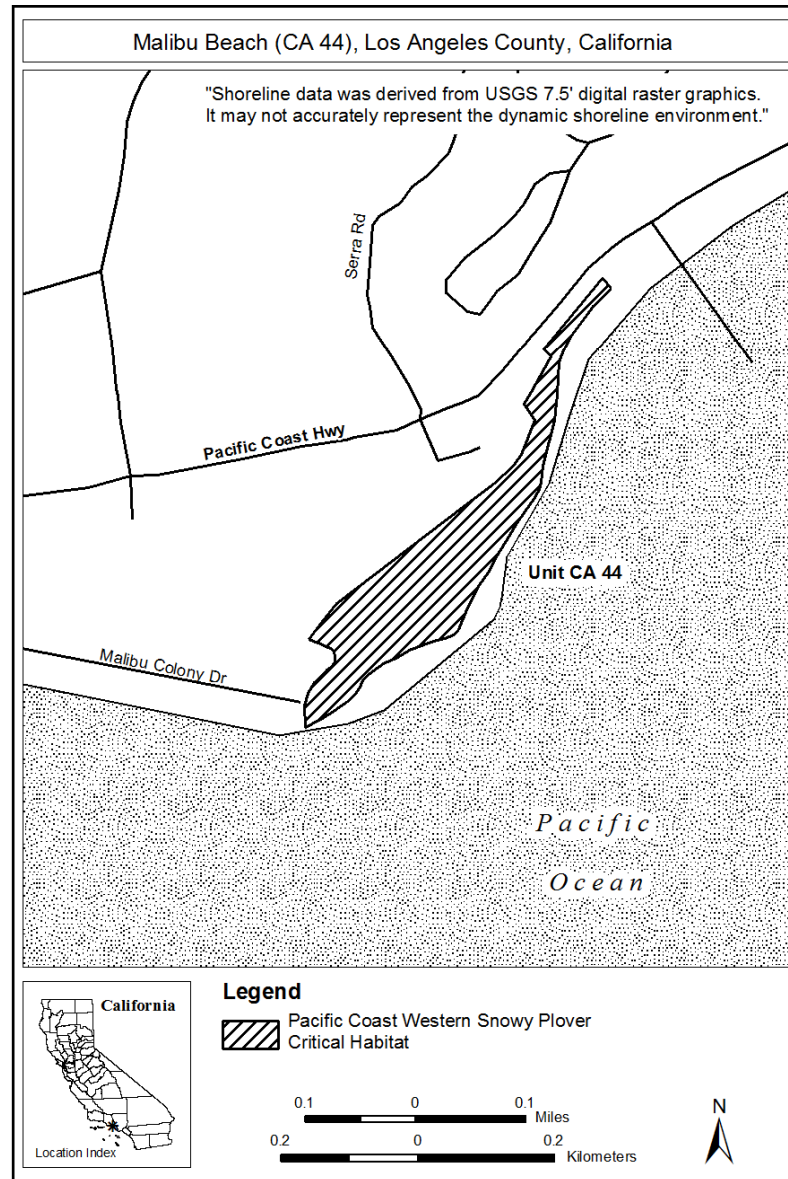
(81) Unit CA 39: Ormond Beach, Ventura County, California. Map follows:



(82) Unit CA 43: Zuma Beach, Los Angeles County, California. Map follows:

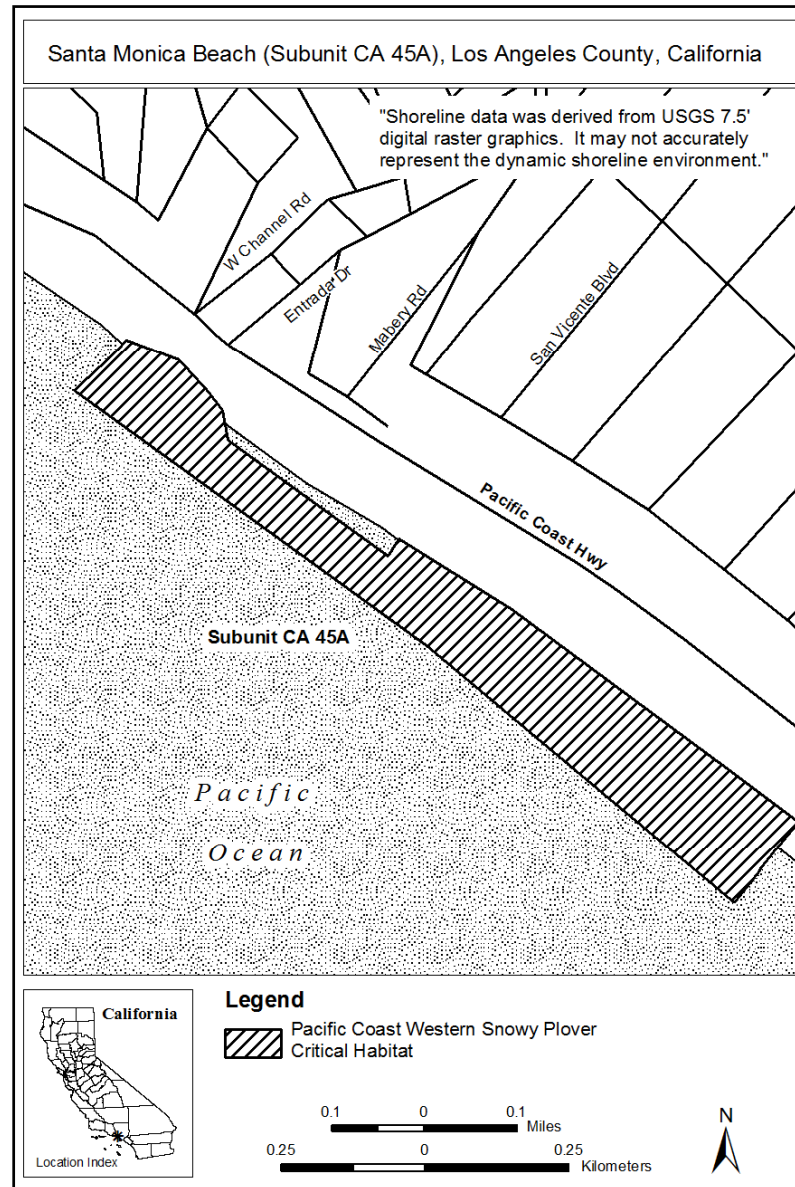


(83) Unit CA 44: Malibu Beach, Los Angeles County, California. Map follows:

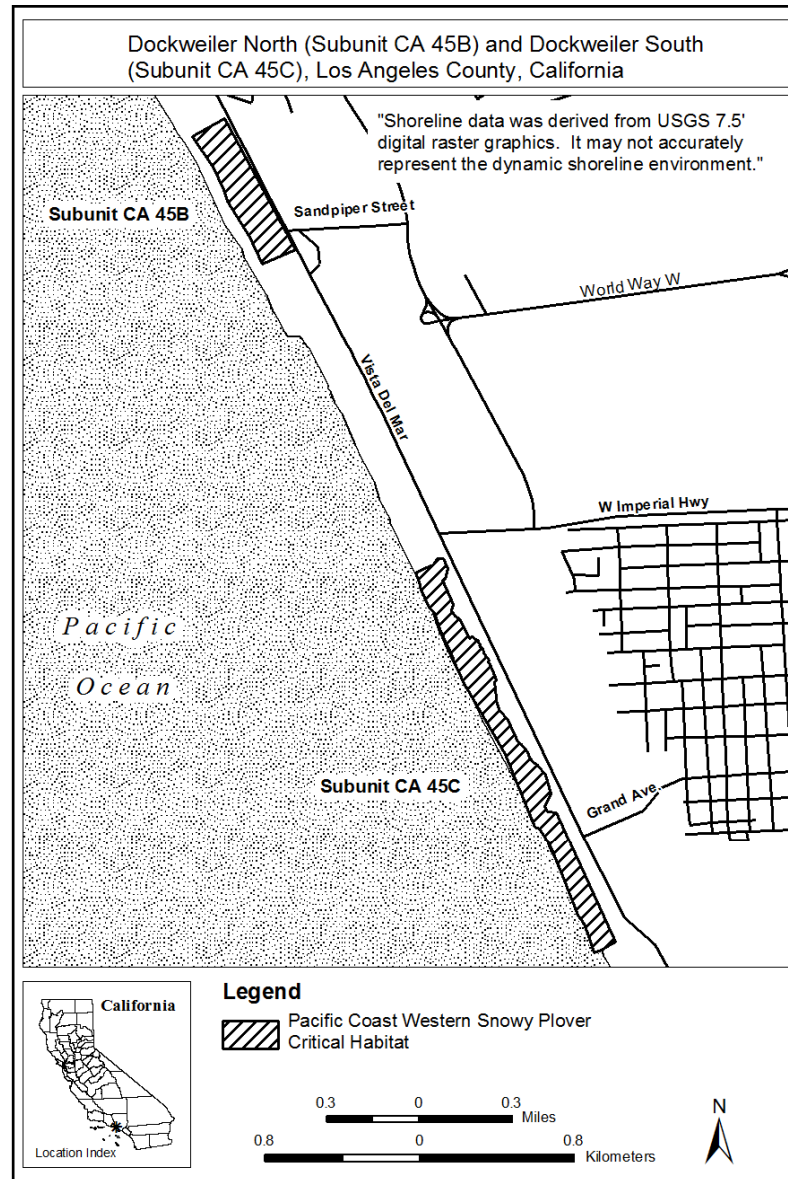


(84) Subunit CA 45A: Santa Monica Beach, Los Angeles County, California.

Map follows:

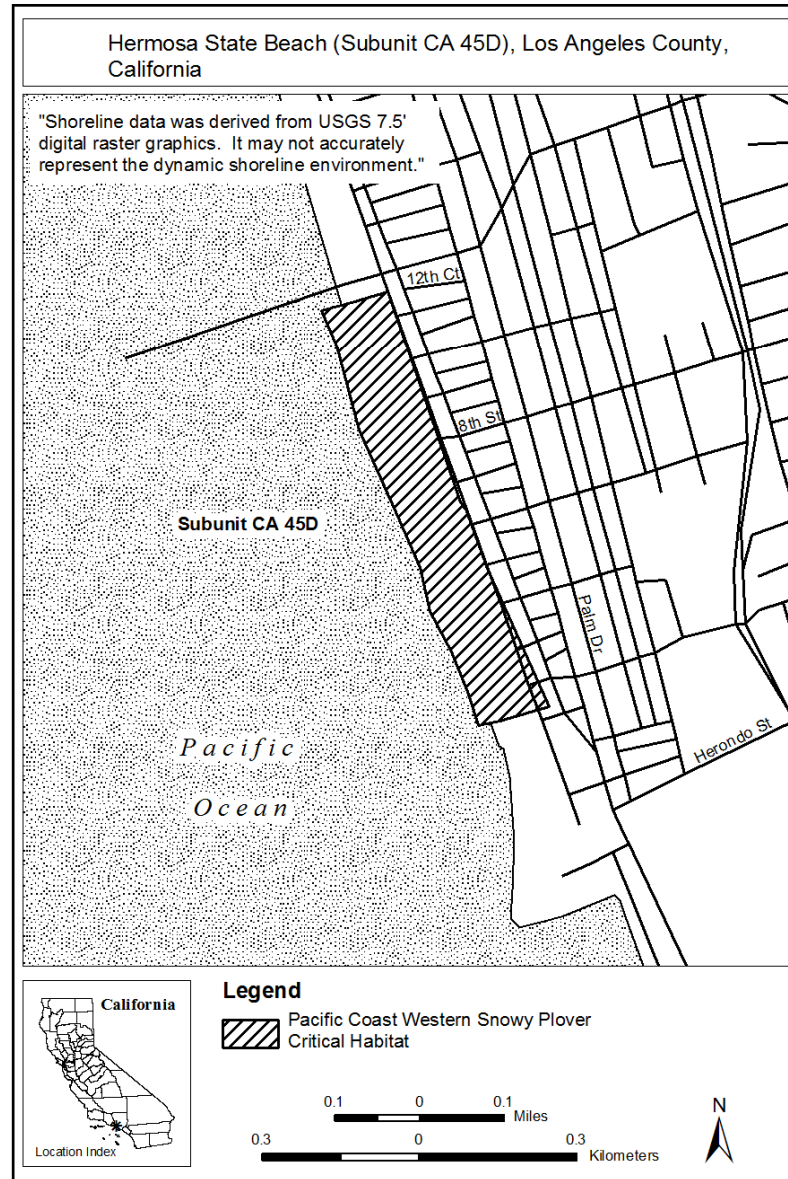


(85) Subunit CA 45B: Dockweiler North, Los Angeles County, California. Map of Subunits CA 45B and CA 45C follows:



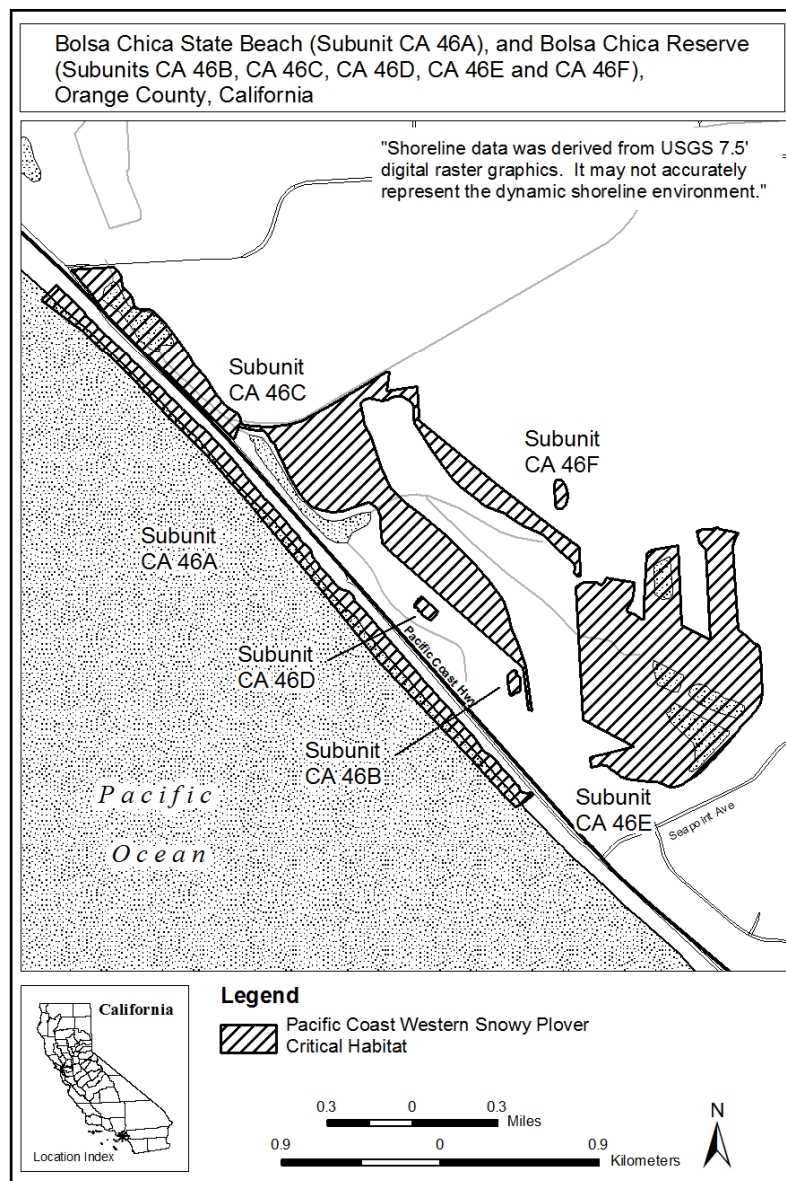
(86) Subunit CA 45C: Dockweiler South, Los Angeles County, California. Map of Subunits CA 45B and CA 45C is provided at paragraph 85 of this entry.

(87) Subunit CA 45D: Hermosa State Beach, Los Angeles County, California.
Map follows:



(88) Subunit CA 46A: Bolsa Chica State Beach, Orange County, California.

Map of Subunits CA 46A through CA 46F follows:



(89) Subunit CA 46B: Bolsa Chica Reserve, Orange County, California. Map of Subunits CA 46A through CA 46F is provided at paragraph 88 of this entry.

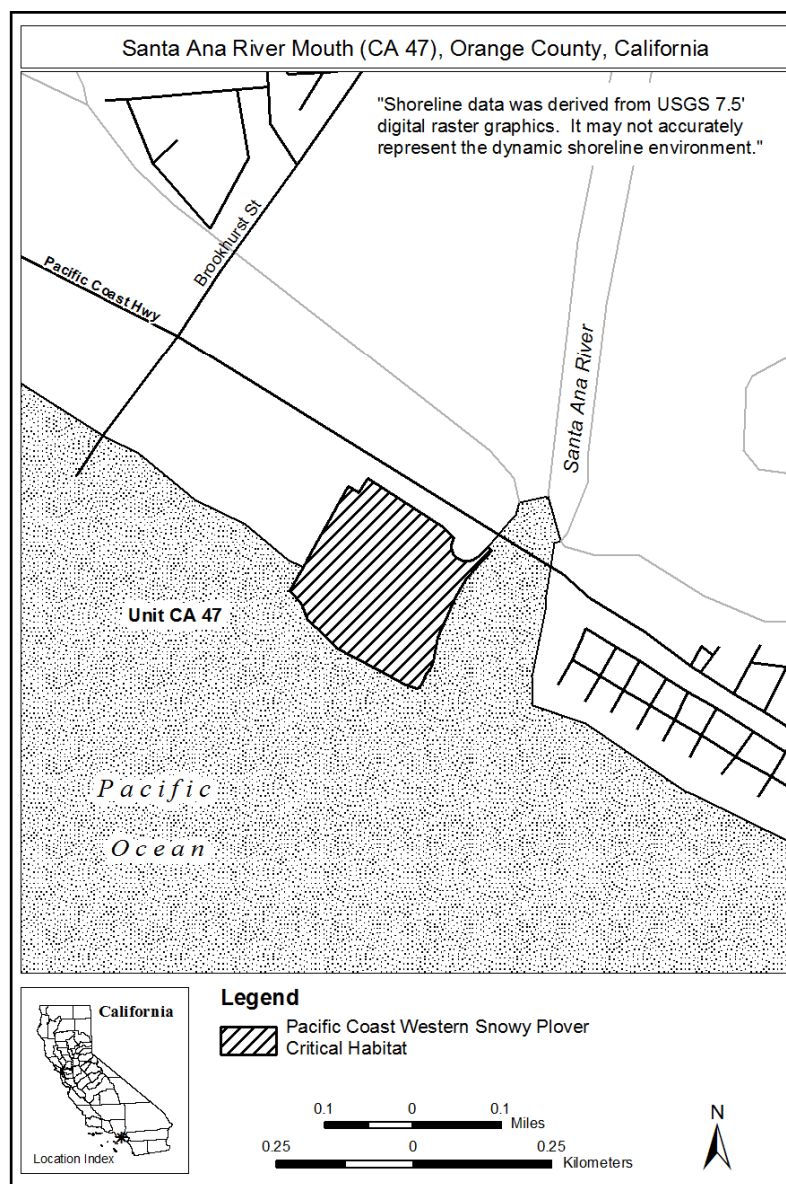
(90) Subunit CA 46C: Bolsa Chica Reserve, Orange County, California. Map of Subunits CA 46A through CA 46F is provided at paragraph 88 of this entry.

(91) Subunit CA 46D: Bolsa Chica Reserve, Orange County, California. Map of Subunits CA 46A through CA 46F is provided at paragraph 88 of this entry.

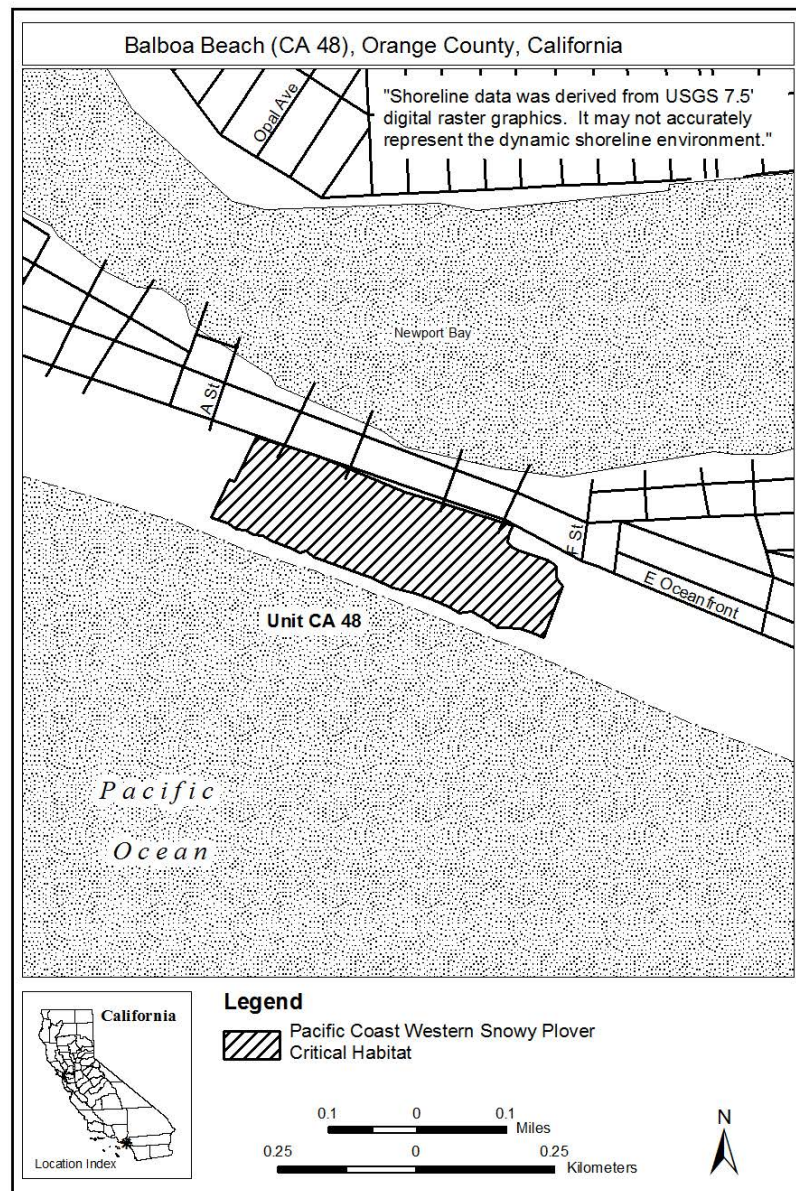
(92) Subunit CA 46E: Bolsa Chica Reserve, Orange County, California. Map of Subunits CA 46A through CA 46F is provided at paragraph 88 of this entry.

(93) Subunit CA 46F: Bolsa Chica Reserve, Orange County, California. Map of Subunits CA 46A through CA 46F is provided at paragraph 88 of this entry.

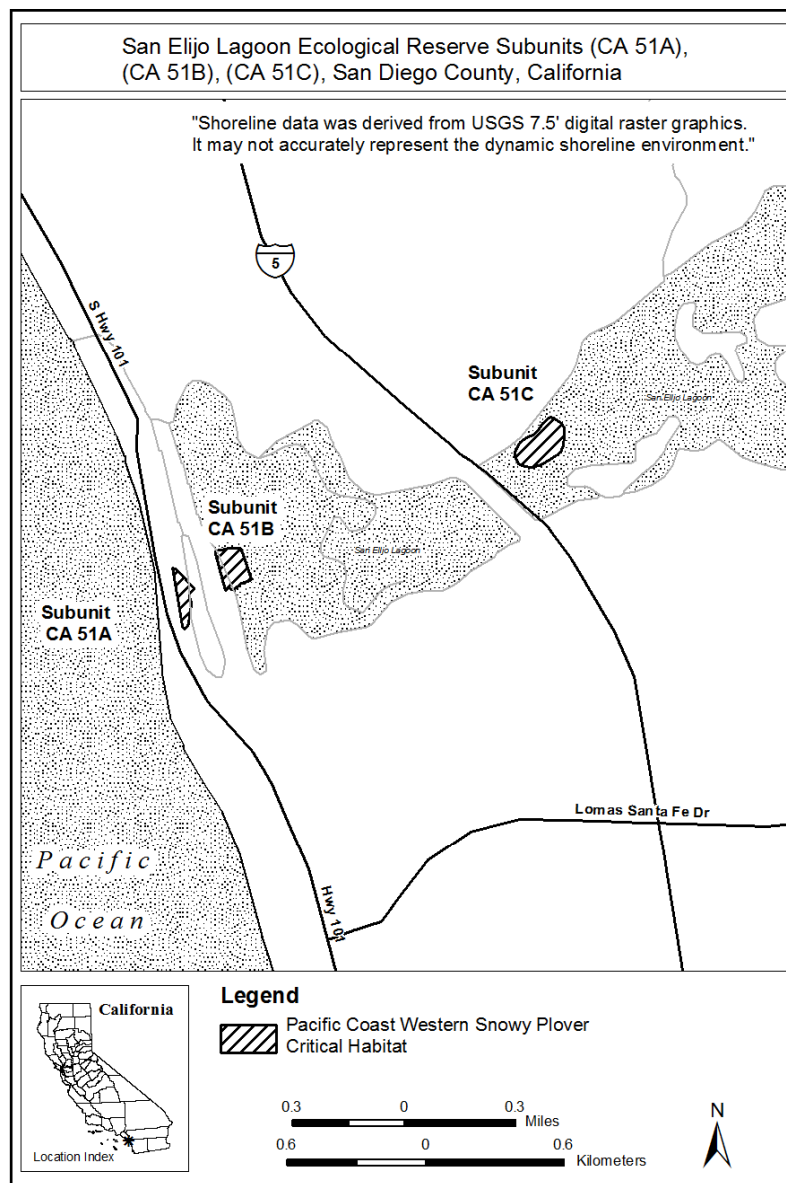
(94) Unit CA 47: Santa Ana River Mouth, Orange County, California. Map follows:



(95) Unit CA 48: Balboa Beach, Orange County, California. Map follows:



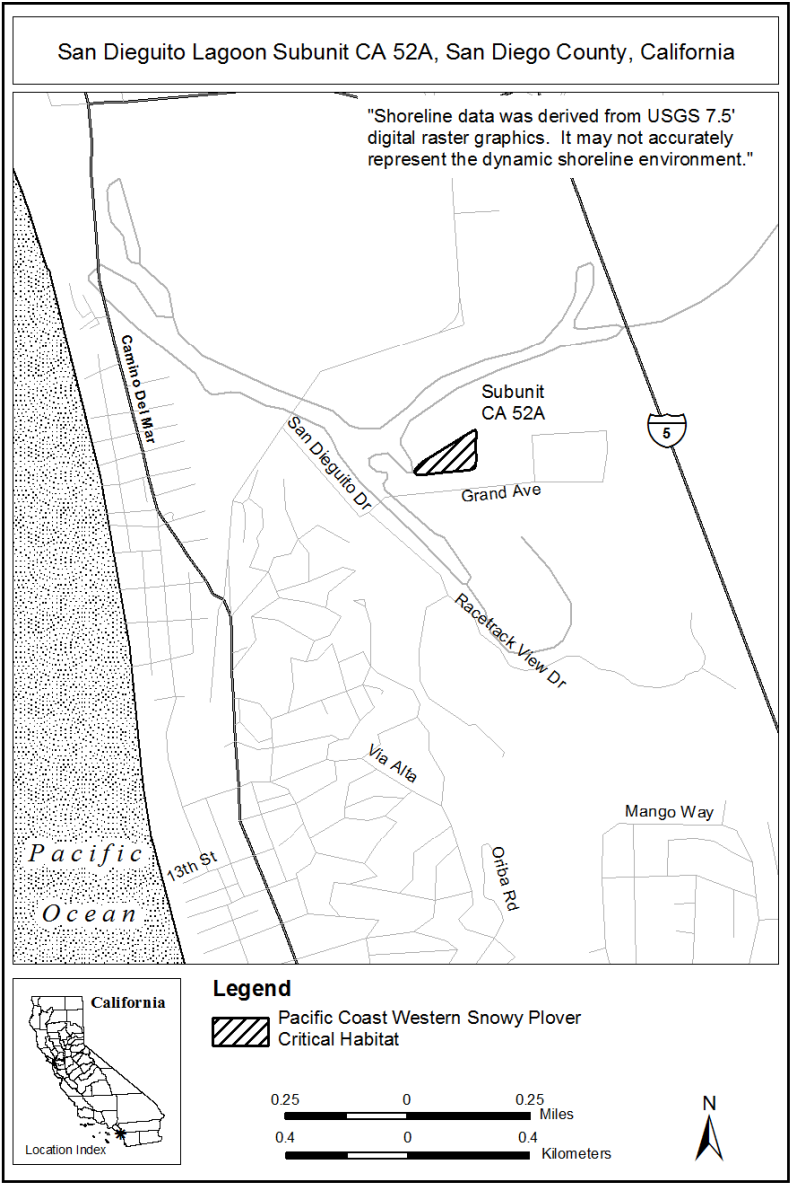
(96) Subunit CA 51A: San Elijo Lagoon Ecological Reserve, San Diego County, California. Map of Subunits CA 51A, CA 51B, and CA 51C follows:



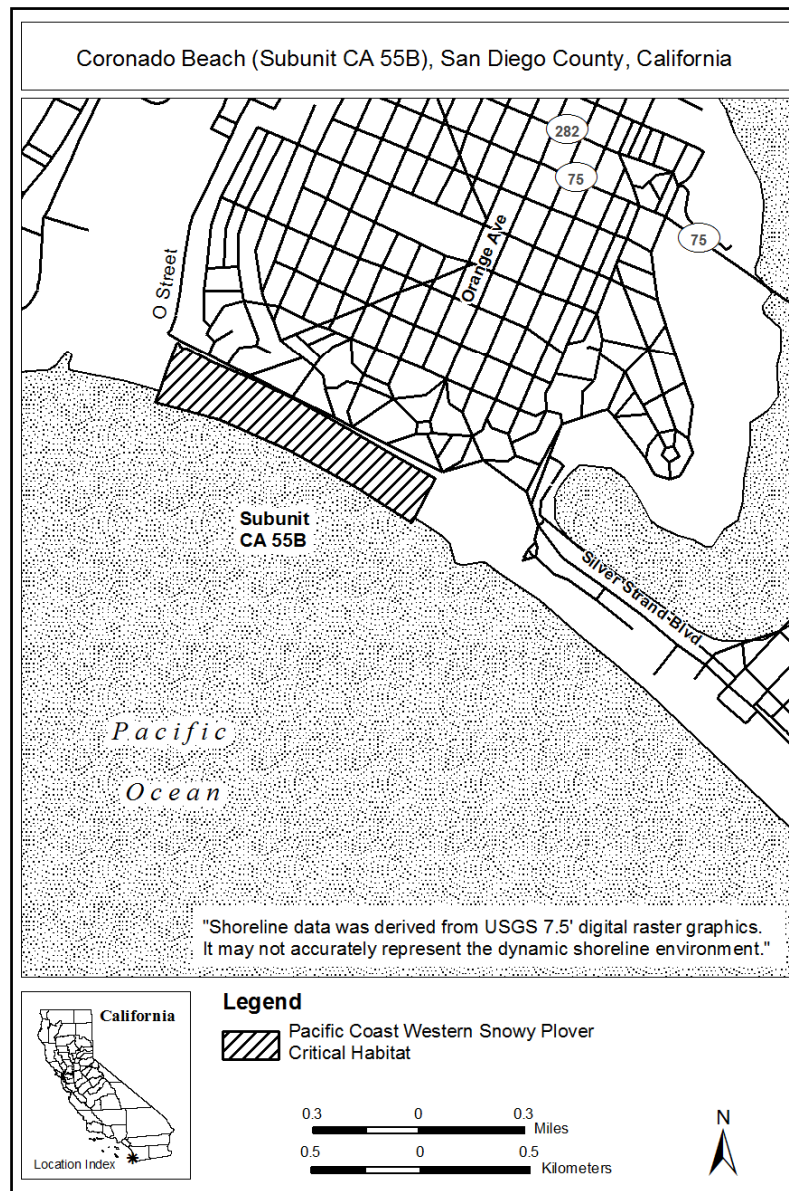
(97) Subunit CA 51B: San Elijo Ecological Reserve, San Diego County, California. Map of Subunits CA 51A, CA 51B, and CA 51C is provided at paragraph 96 of this entry.

(98) Subunit CA 51C: San Elijo Ecological Reserve, San Diego County, California. Map of Subunits CA 51A, CA 51B, and CA 51C is provided at paragraph 96 of this entry.

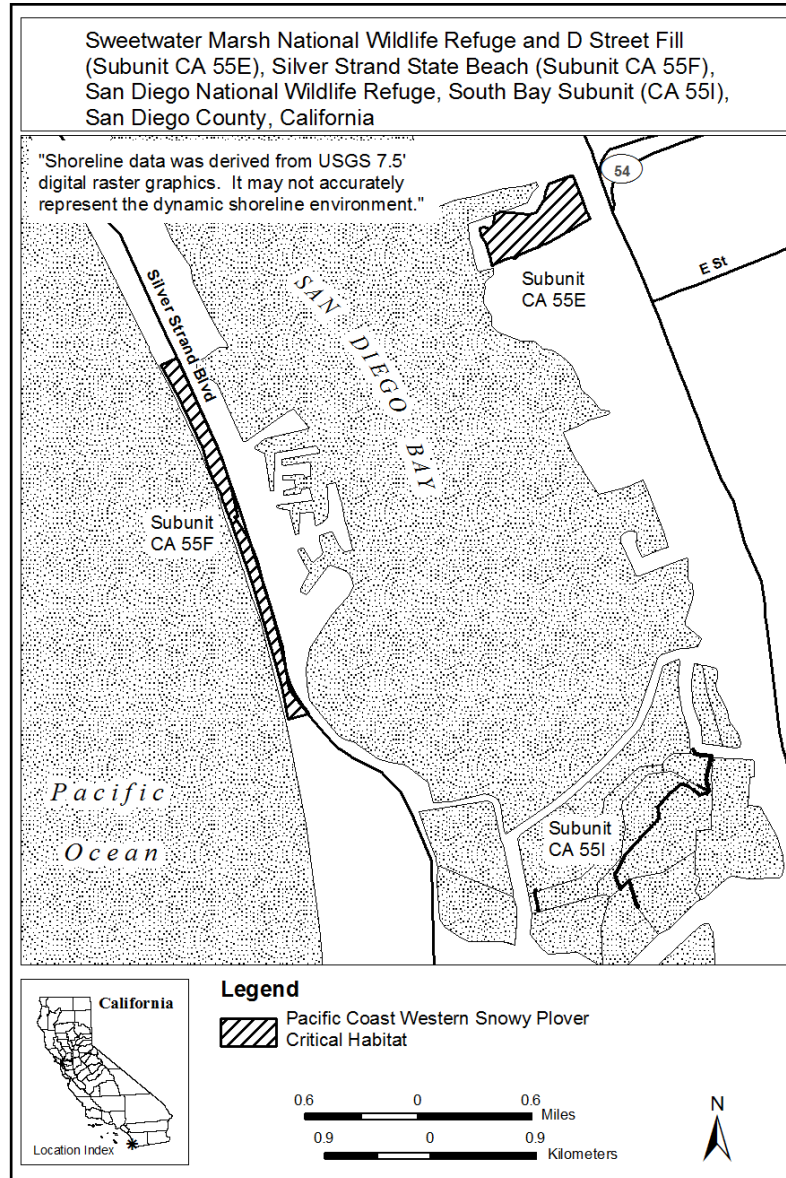
(99) Subunit CA 52A: San Dieguito Lagoon, San Diego County, California. Map follows:



(100) Subunit CA 55B: Coronado Beach, San Diego County, California. Map follows:



(101) Subunit CA 55E: Sweetwater Marsh National Wildlife Refuge, San Diego County, California. Map of Subunits CA 55E, CA 55F, and CA 55I follows:



(102) Subunit CA 55F: Silver Strand State Beach, San Diego County, California.

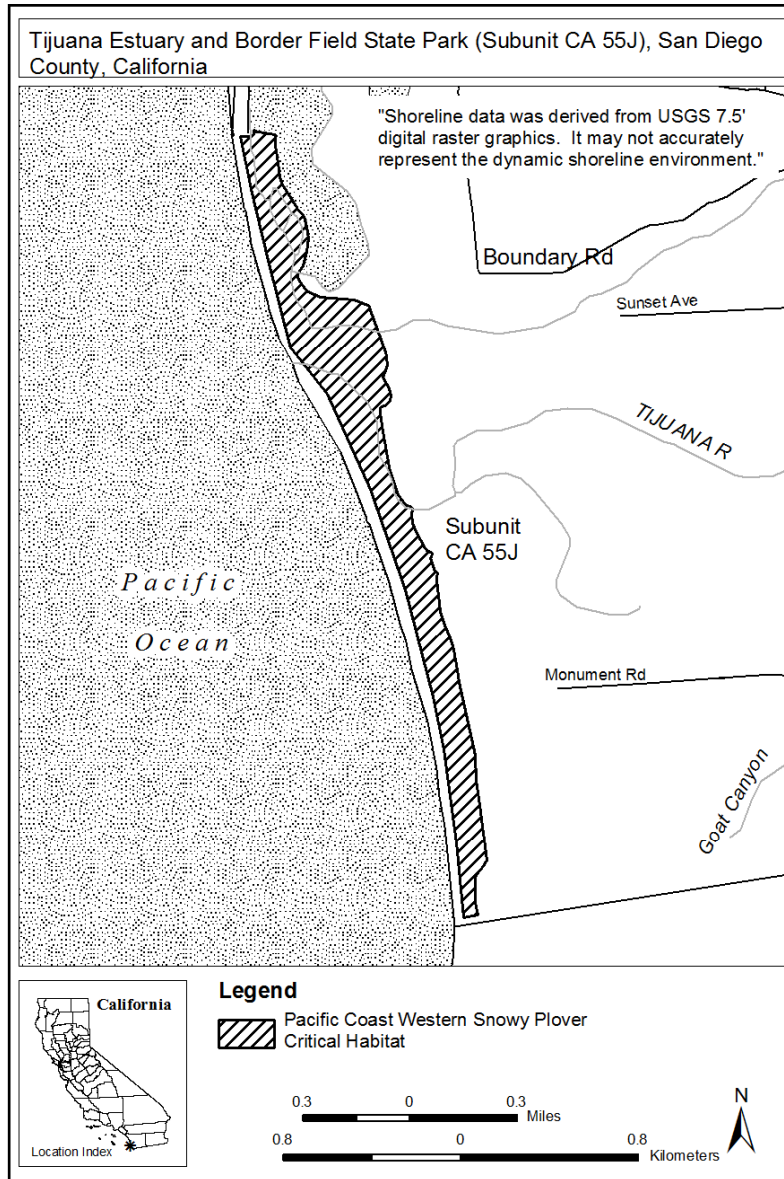
Map of Subunits CA 55E, CA 55F, and CA 55I is provided at paragraph 101 of this entry.

(103) Subunit CA 55I: San Diego National Wildlife Refuge - South Bay Unit,

San Diego County, California. Map of Subunits CA 55E, CA 55F, and CA 55I is provided at paragraph 101 of this entry.

(104) Subunit CA 55J: Tijuana Estuary and Border Field State Park, San Diego

County, California. Map follows:



* * * * *

Dated: May 30, 2012

Rachel Jacobson

Acting Assistant Secretary for Fish and Wildlife and Parks

Billing Code 4310-55-P

[FR Doc. 2012-13886 Filed 06/18/2012 at 8:45 am; Publication Date: 06/19/2012]